

APPLIED NONLINEAR CONTROL

Jean-Jacques E. Slotine
Weiping Li

Applied Nonlinear Control

AN Whitehead



Applied Nonlinear Control:

Getting the books **Applied Nonlinear Control** now is not type of challenging means. You could not on your own going bearing in mind book gathering or library or borrowing from your links to retrieve them. This is an utterly simple means to specifically acquire lead by on-line. This online message Applied Nonlinear Control can be one of the options to accompany you subsequently having further time.

It will not waste your time. bow to me, the e-book will extremely look you additional event to read. Just invest tiny times to read this on-line publication **Applied Nonlinear Control** as without difficulty as evaluation them wherever you are now.

https://enterpriseenrollment.cruiselady.com/results/book-search/Download_PDFS/Accounting_Standards_Vol_1_Original_Pronouncements_As_Of_June_1_1982.pdf

Table of Contents Applied Nonlinear Control

1. Understanding the eBook Applied Nonlinear Control
 - The Rise of Digital Reading Applied Nonlinear Control
 - Advantages of eBooks Over Traditional Books
2. Identifying Applied Nonlinear Control
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Applied Nonlinear Control
 - User-Friendly Interface
4. Exploring eBook Recommendations from Applied Nonlinear Control
 - Personalized Recommendations
 - Applied Nonlinear Control User Reviews and Ratings
 - Applied Nonlinear Control and Bestseller Lists

5. Accessing Applied Nonlinear Control Free and Paid eBooks
 - Applied Nonlinear Control Public Domain eBooks
 - Applied Nonlinear Control eBook Subscription Services
 - Applied Nonlinear Control Budget-Friendly Options
6. Navigating Applied Nonlinear Control eBook Formats
 - ePub, PDF, MOBI, and More
 - Applied Nonlinear Control Compatibility with Devices
 - Applied Nonlinear Control Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Applied Nonlinear Control
 - Highlighting and Note-Taking Applied Nonlinear Control
 - Interactive Elements Applied Nonlinear Control
8. Staying Engaged with Applied Nonlinear Control
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Applied Nonlinear Control
9. Balancing eBooks and Physical Books Applied Nonlinear Control
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Applied Nonlinear Control
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Applied Nonlinear Control
 - Setting Reading Goals Applied Nonlinear Control
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Applied Nonlinear Control
 - Fact-Checking eBook Content of Applied Nonlinear Control
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
- Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Applied Nonlinear Control Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Applied Nonlinear Control free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Applied Nonlinear Control free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that offer free PDF downloads on a specific topic. While downloading Applied Nonlinear Control free PDF files is convenient, its

important to note that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but its essential to be cautious and verify the authenticity of the source before downloading Applied Nonlinear Control. In conclusion, the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether its classic literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Applied Nonlinear Control any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Applied Nonlinear Control Books

What is a Applied Nonlinear Control PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. **How do I create a Applied Nonlinear Control PDF?** There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. **How do I edit a Applied Nonlinear Control PDF?** Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. **How do I convert a Applied Nonlinear Control PDF to another file format?** There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. **How do I password-protect a Applied Nonlinear Control PDF?** Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe Acrobat, Preview (on Mac),

or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Applied Nonlinear Control :

[accounting standards vol. 1 original pronouncements as of june 1 1982](#)

[aconia survey neolithic settlement th](#)

[abstracts of the testamentary proceedings of the prerogative court of maryland. volume i 1658-1674](#)

[absolut the absolut vodka advertising story](#)

[acceptance world](#)

[accidental parents silhouette special edition 1247](#)

[academic freedom and apartheid the story of the world archaeological congress](#)

[absolute beginners guide to microsoft office word 2003](#)

abstract data types & algorithms

absolute c++ 2nd

access las vegas

[accounting workbook for quickbooks 2000 pb 2002. with cd](#)

abschied von den eltern

absolute beginners cookbook or how long do i cook a 3-minute egg

access to the airwaves

Applied Nonlinear Control :

non ti amavo translation in english italian english dictionary - Dec 07 2022

web non ti amavo translation in italian english reverso dictionary see also amaro amato amarico amatore examples definition conjugation

[ti amavo italian edition sql gocohospitality com](#) - Jun 01 2022

web ti amavo italian edition downloaded from sql gocohospitality com by guest decker jefferson italian futurism and the first world war cambridge scholars publishing this is an extraordinary achievement and it will become an absolutely vital and

trusted resource for everyone working in the

ti amavo translation into english examples italian reverso - Oct 05 2022

web translations in context of ti amavo in italian english from reverso context da quel momento ho saputo che ti amavo

[ti amavo italian edition by dario boscolo desk cw no](#) - May 12 2023

web lecturer in italian tutti per uno italian edition ebook lore pittacus may 11th 2020 tutti per uno italian edition la famiglia e la ragazza che amavo ho letto tutti i libri senza riuscire a smettere non vedevo l ora di arrivare alla fine anche questo e gli altri ti tiene attaccato nonostante sia l ultimo di una lunga serie consigliatissimo

ti amavo e ti translation into english examples italian - Aug 03 2022

web translations in context of ti amavo e ti in italian english from reverso context mi sono lasciata trasformare perché ti amavo e ti volevo

[ti avviso translation into english examples italian reverso](#) - Apr 30 2022

web ma ti avviso se diventa causa di disordini non sarò così tollerante but i warn you if he becomes a disruption i will not be so tolerant se mi serve qualcun altro ti avviso

il divo ti amerò lyrics english translation - Mar 30 2022

web apr 30 2013 you don t know how much i ll continue to believe that we are one soul you and me and i ll love you nevertheless i know even if you are not with me i ll love you i ll carry you to the sun in the dreams that i make i ll steal the colours of the morning

[ti amavo italian edition by dario boscolo speakings gestamp](#) - Jul 14 2023

web may 1 2023 ti amavo italian edition by dario boscolo full text of a dictionary of the english and italian languages improved and augmented with above ten thousand words omitted in the last edition of altieri to which is added an italian and english grammar see other formats fabrizio de andré in english fabrizio de andré the revered italian singer

[ti amavo italian edition by dario boscolo](#) - Dec 27 2021

web ti amavo italian edition by dario boscolo february 24th 2020 alessandra amoroso is an italian pop soul singer she was the winner of the 2009 edition of the italian talent show amici di maria de casa e abitudini volevo un po d amore e un minimo di supporto e cambiai città io non l avrei fatto mai perché ti

ti amavo translation in english italian english dictionary reverso - Feb 09 2023

web ti amavo translation in italian english reverso dictionary see also amaro amato amarico amatore examples definition conjugation

ti amavo italian edition kindle edition amazon in - Aug 15 2023

web select the department you want to search in

[ti amavo e translation into english examples italian reverso](#) - Sep 04 2022

web translations in context of ti amavo e in italian english from reverso context ti amavo e ti promisi che non avrei mai più amato un'altra donna

[ti amavo italian edition htaccess guide](#) - Jul 02 2022

web mar 18 2023 ti amavo italian edition below catalog of copyright entries library of congress copyright office 1968 italian futurism and the first world war selena daly 2016 09 23 selena daly's work is the first comprehensive study of futurism during the first world war period in this book she examines the cultural political and military

[io ti amavo translation into english examples italian reverso](#) - Mar 10 2023

web translations in context of io ti amavo in italian english from reverso context senti ascolta io ti amavo

[what does ti adoro mean in italian wordhippo](#) - Nov 06 2022

web what does ti adoro mean in italian english translation i love you more meanings for ti adoro i adore you ti adoro find more words

ti amavo italian edition help environment harvard edu - Jun 13 2023

web merely said the ti amavo italian edition is universally compatible in imitation of any devices to read living studying and working in italy travis neighborhood 2014 04 08 all the information you could possibly need for your time in italy whether a week or a decade in a completely updated and revised edition so you

ti amavo italian edition by dario boscolo - Jan 28 2022

web ti amavo italian edition by dario boscolo omegauupdate tutti per uno italian edition ebook lore pittacus from piemonte to veneto the odd tradition to get cheese fabrizio de andré in english 2013 starò meglio lyrics journal of italian translation brooklyn college academic home nista ti in english with contextual examples

[ti amavo italian edition pdf 2023 elections freep](#) - Feb 26 2022

web ti amavo italian edition pdf in a fast paced digital era where connections and knowledge intertwine the enigmatic realm of language reveals its inherent magic its capacity to stir emotions

[ti amavo song and lyrics by carmelo siani spotify](#) - Jan 08 2023

web carmelo siani song 2015

[ti amavo italian edition ebook kindle amazon com br](#) - Apr 11 2023

web compre o ebook ti amavo italian edition de boscolo dario na loja ebooks kindle encuentre ofertas os livros mais vendidos e dicas de leitura na amazon brasil

pdf wall street by nicolas darvas ebook perlego - Jul 01 2022

web wall street the other las vegas by nicolas darvas the author of how i made 2 000 000 in the stock market bnpublishing

com 2016

wall street the other las vegas by nicolas darvas the - May 11 2023

web may 12 2009 buy wall street the other las vegas by nicolas darvas the author of how i made 2 000 000 in the stock market by darvas nicolas isbn

las vegas hotel workers move closer to potential strike wsj - Aug 22 2021

web the wall street journal dawn gilbertson las vegas the bellman at the bellagio resort casino was frank with the couple in line to check their bags early wednesday morning

download wall street the other las vegas by nicolas darvas - Nov 05 2022

web wall street the other las vegas is a guidebook that offers a new understanding of what stock trading is all about by a man who learned to beat the system and make millions

wall street the other las vegas book finnotes - Oct 04 2022

web wall street the other las vegas darvas nicolas on amazon com free shipping on qualifying offers wall street the other las vegas

wall street the other las vegas amazon com - Apr 17 2021

web feb 1 2002 availability 1 wall street the other las vegas the other las vegas february 1 2002 lyle stuart paperback in english new ed edition 0818403985

wall street the other las vegas by nicolas darvas the author - Mar 09 2023

web in this book darvas first portrays the market he knows so intimately the gambling house with dealers on one side winners on the other he also shows how he places the odds

wall street the other las vegas by nicolas darvas the author - Aug 02 2022

web book details table of contents citations about this book nicolas darvas the man who made 2 000 000 in the stock market in his spare time shows you exactly how he

wall street the other las vegas nicolas darvas google books - Dec 06 2022

web download wall street the other las vegas pdf description nicolas darvas the man who made 2 000 000 in the stock market in his spare time shows you exactly how he

the cyberattack that sent las vegas back in time msn - Jul 21 2021

web sep 11 2023 your best shot at seeing this comet is tuesday morning when it s closest to earth it will be closest to the sun on sept 17 after which it will come around and be

amazon com wall street the other las vegas by - Feb 13 2021

wall street the other las vegas paperback january 1 1964 - Sep 03 2022

web wall street the other las vegas by nicolas darvas the author of how i made 2 000 000 in the stock market darvas nicolas amazon com tr kitap

the best convention centers in the u s wsj the wall street - Mar 29 2022

web jul 21 2021 a list of the most celebrated and admired authors of english as well as non english from the different corners of the world select any author and start reading books

loading interface goodreads - Apr 29 2022

web sep 14 2023 in a wall street journal ranking of 30 centers the ones in las vegas and chicago take the top two spots attendees roam the las vegas convention center

wall street the other las vegas nicolas darvas - Jan 27 2022

web definitions and other important information dimensional us large cap index jan 1928 sep 1999 dimensional us large cap index composition market capitalization

wall street the other las vegas nicolas darvas - Feb 25 2022

web wall street the other las vegas nicolas darvas view profile call for proposals closed schwartz a history from schwartz 1 not in library m b julien anthology complex

wall street the other las vegas by nicolas darvas the - Feb 08 2023

web sep 28 2020 wall street the other las vegas by nicolas darvas 1964 l stuart edition in english

amazon com wall street the other las vegas by nicolas - Jun 12 2023

web amazon com wall street the other las vegas by nicolas darvas the author of how i made 2 000 000 in the stock market audible audio edition nicolas darvas will

print edition wsj com the wall street journal - Oct 24 2021

web sep 15 2023 ceo with 110 million pay package is suddenly out the cyberattack that sent las vegas back in time hunter biden indicted on gun charges

wall street the other las vegas open library - Jan 07 2023

web wall street the other las vegas by nicolas darvas the author of how i made nicolas darvas no preview available 2008 *index fund advisors inc ifa com* - Dec 26 2021

web wall street the other las vegas nicolas darvas 1 of 5 stars 2 of 5 stars 3 of 5 stars 4 of 5 stars 5 of 5 stars 282928 iole borrow flag as offensive obligatory for fans of dark

in the navy dallas cowboys making uniform change nfl - May 19 2021

web wall street the other las vegas mass market paperback january 1 1964 by nicolas nicolas darvas darvas author 4 3 out of

5 stars 84 ratings

wall street the other las vegas nicolas darvas google books - Aug 14 2023

web wall street the other las vegas is an extraordinary book offering a new understanding of what stock trading is all about by a man who learned to beat the system and make

the wall street journals news archive for september 15 2023 - Sep 22 2021

web sep 7 2023 sept 7 2023 1 14 pm et thousands of workers are employed in the hotels casinos and restaurants on the las vegas strip photo mikayla whitmore for the wall

wall street the other las vegas by nicolas darvas goodreads - Jul 13 2023

web jun 22 2021 in this book darvas first portrays the market he knows so intimately the gambling house with dealers on one side winners on the other he also shows how he

read pdf wall street the other las vegas by nicolas darvas - May 31 2022

web discover and share books you love on goodreads

nishimura green comet what is it how to see it and when it will - Jun 19 2021

web sep 13 2023 updated by the minute our dallas cowboys nfl tracker news and views and moves inside the star and around the league

wall street the other las vegas by nicolas darvas open library - Mar 17 2021

wall street the other las vegas amazon com - Apr 10 2023

web feb 1 2002 darvas regt sich in seinem zweiten buch über weite strecken über die hohen kommissionen bei wertpapiertransaktionen auf die es wall street firmen ermöglichen

wall street the other las vegas nicolas darvas - Nov 24 2021

web sep 13 2023 read wsj print edition from the wall street journal the cyberattack that sent las vegas back in time recommended videos cyberattack continues to

electricity security matters more than ever power - Jul 31 2023

web system security which refers to the capability of a power system using its existing resources to maintain reliable power supplies in the face of unexpected shocks and

reforming the u n security council america s pro israel bully - Mar 03 2021

electricity security 2021 analysis iea - May 29 2023

web oct 23 2020 power system flexibility is the cornerstone of electricity security in modern power systems flexibility refers

to a variety of services spanning time scales measured

power system security iet journals magazine ieeexplore - Aug 20 2022

web when the system is operating within the range of acceptable limits it is considered to be secure for frequency the

optimal operation of the system is 50 cycles per second or

army gets first high power microwave prototype to counter drone - May 05 2021

web oct 30 2023 dsa 2023 410 security update for dell avamar dell networker virtual edition nve and dell powerprotect dp

series appliance dell integrated data

elektrik kesintisinden sistemi korumak için tavsiyeler - Jan 13 2022

web we would like to show you a description here but the site won't allow us

new energy power system operation security evaluation based - Oct 22 2022

web mar 1 2023 1 introduction power system security has always been a subject of paramount importance as electric grids

transform into convoluted structures to address

assessing power system security a framework and a - Jun 29 2023

web dec 1 2015 power system security system modelling integrated energy modelling introduction the europe union has put

in place legislation to underpin the transition

fact sheet president biden issues executive order on safe - Jul 07 2021

web oct 30 2023 the international code of conduct for organizations developing advanced ai systems aims to promote safe

secure and trustworthy ai worldwide and will provide

power system security assessment and enhancement - Oct 02 2023

earlier a number of mathematical conventional algorithms like newton method 83 linear programming 84 85 gradient method

86 87 and mixed integer linear programming 88 were addressed to solve optimal power flow opf problem these methods face

difficulty in handling inequality see more

security aemc - Jul 19 2022

web power system security may be defined as the ability of a power system network to withstand contingencies changes and

remain in its secure state or operate within its

dsa 2023 410 security update for dell avamar dell networker - Apr 03 2021

web 2 days ago the security council should reflect changing international power dynamics reform this system that

continually oppresses palestinians and has built up to the

power system security iit kanpur - Apr 15 2022

web power system security analysis power system security analysis can be broken down into two major functions that are

carried out in an operations control centre security

electricity security in tomorrow s power systems analysis iea - Apr 27 2023

web system security can be keywords power system security contingency analysis security enhancement static security assessment dynamic security assessment classified on

static security assessment of power systems a review - Dec 24 2022

web oct 22 2022 power systems security assessment based on artificial neural networks abstract power system security assessment is a major issue among the fundamental

power system security electricaleasy com - Jun 17 2022

web dec 1 2021 the analysis of dynamic security involves the study of various types of system wide stability phenomena such as rotor angle frequency or voltage stability

calculating voltage feasibility boundaries for power system - Sep 20 2022

web power system security abstract incidents on the electricity transmission system have a low probability but a high impact the author describes how all phenomena that have this

power systems security assessment based on artificial neural - Nov 22 2022

web jul 25 2022 however the conventional security analyses whether static security analysis 8 15 16 17 or dynamic security analysis 18 19 20 21 22 usually can only

welcome to power system solutions international - Oct 10 2021

web october 23 2023 12 35 pm 1 in a rare display of transparency us energy services firm bhi energy details how the akira ransomware operation breached their networks and

us energy firm shares how akira ransomware hacked its systems - Sep 08 2021

web oct 21 2016 power security içerisinde uygulama kilitleme gibi kullanışlı özelliklere yer veren ve android hızlandırma konusunda yardımcı olan bir mobil antivirüs uygulaması

future of energy systems and supply chains in focus at the 6th - Feb 11 2022

web dec 5 2016 Öncelikle akım koruyucu prizler sanıldığı gibi gecikmeli güç sağlayamayacağı gibi elektrik dalgalanmalarına karşı da cihazları korumaz zira elektrik dalgalanması

power system security assessment and enhancement - Mar 27 2023

web oct 4 2004 power system security assessment abstract security refers to the degree of risk in a power system s ability to survive imminent disturbances contingencies

techniques of power system static security assessment - Jan 25 2023

web may 4 2020 moreover power system security assessment has become more critical because the power networks have

been pushed towards operating near their security

[power system security contingency analysis in power system](#) - Mar 15 2022

web oct 30 2023 the strategic outlook for energy markets system vulnerabilities and industry competition took centre stage at this year s edition of the vienna energy

[power security İndir Ücretsiz İndir tamindir](#) - Aug 08 2021

web oct 30 2023 the departments of energy and homeland security will also address ai systems threats to critical infrastructure as well as chemical biological radiological

power system security concepts and principles strengthening - Sep 01 2023

due to a rapid increase in electricity demand the modern power systems run close to their stability limits the energy management centers must have to run the see more

power system security assessment iee journals magazine - Feb 23 2023

web mar 1 2023 the issue of power system security is beyond supplying continuous power in deregulated and competitive market environments 6 among several operational

quora - Dec 12 2021

web oct 30 2023 eq uity and fairness are fundamental principles upheld by oe ensuring that clean energy opportunities are accessible to all communities particularly those that

[hiroshima process international code of conduct for advanced](#) - Jun 05 2021

web 1 day ago nov 1 06 15 am pictured is the epirus leonidas a counter drone and counter electronics high power microwave system provided epirus washington epirus

justice week 2023 highlighting the energy department of - Nov 10 2021

web power system solutions international inc 5524 2nd street sw calgary ab t2h 0g9 canada tel 403 301 0094 fax 403 302 0095

selecting decision trees for power system security assessment - May 17 2022

web what is power system security power system security may be looked upon as the probability of the system s operating point remaining within acceptable ranges given the