

## **MASTERS RESEARCH/THESIS PROPOSAL**

An M.S. student must prepare a research/thesis proposal that should be typewritten in a double-spaced format and it should be approximately 5-10 pages in length.

The research/thesis proposal should do the following:

- Explain what the student intends to do
- Explain the value of the research
- Outline the research plan
- Define specific criteria for the completion of the research/thesis
- Include a timetable for the completion of the research/thesis
- Include a bibliography relevant to the research/thesis

After the student's faculty advisor is satisfied with the student's research/thesis proposal, the student may submit the proposal to the rest of the research committee. Any member of the committee may establish a requirement for the student to make an oral presentation of the proposal. The research committee evaluates the proposal in terms of:

1. The value of the research
2. The feasibility of the research/thesis plan, and
3. The student's preparation for carrying out the proposed research

The committee will accept the proposal as written, accept it with changes, or reject it. When the committee accepts the proposal, each committee member must sign the approval page given below. Then the student must submit the proposal to the graduate advisor.

A student must have an approved thesis proposal on file with the graduate advisor and an approved MS Thesis form before the student can register for the final 3 hours of research or thesis credits.

# Research Proposal Sample For Masters In Engineering

**M Tight**



**Research Proposal Sample For Masters In Engineering:**

Yeah, reviewing a ebook **Research Proposal Sample For Masters In Engineering** could accumulate your close friends listings. This is just one of the solutions for you to be successful. As understood, deed does not recommend that you have extraordinary points.

Comprehending as well as promise even more than extra will offer each success. bordering to, the revelation as competently as acuteness of this Research Proposal Sample For Masters In Engineering can be taken as well as picked to act.

<https://db1.greenfirefarms.com/results/book-search/default.aspx/simple%20ai%20image%20generator%20tips%20for%20creators%2012717.pdf>

## **Table of Contents Research Proposal Sample For Masters In Engineering**

1. Understanding the eBook Research Proposal Sample For Masters In Engineering
  - The Rise of Digital Reading Research Proposal Sample For Masters In Engineering
  - Advantages of eBooks Over Traditional Books
2. Identifying Research Proposal Sample For Masters In Engineering
  - 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 Research Proposal Sample For Masters In Engineering
  - User-Friendly Interface
4. Exploring eBook Recommendations from Research Proposal Sample For Masters In Engineering
  - Personalized Recommendations
  - Research Proposal Sample For Masters In Engineering User Reviews and Ratings
  - Research Proposal Sample For Masters In Engineering and Bestseller Lists
5. Accessing Research Proposal Sample For Masters In Engineering Free and Paid eBooks

## Research Proposal Sample For Masters In Engineering

---

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

### **Research Proposal Sample For Masters In Engineering Introduction**

Research Proposal Sample For Masters In Engineering Offers over 60,000 free eBooks, including many classics that are in the public domain. Open Library: Provides access to over 1 million free eBooks, including classic literature and contemporary works. Research Proposal Sample For Masters In Engineering Offers a vast collection of books, some of which are available for free as PDF downloads, particularly older books in the public domain. Research Proposal Sample For Masters In Engineering : This website hosts a vast collection of scientific articles, books, and textbooks. While it operates in a legal gray area due to copyright issues, its a popular resource for finding various publications. Internet Archive for Research Proposal Sample For Masters In Engineering : Has an extensive collection of digital content, including books, articles, videos, and more. It has a massive library of free downloadable books. Free-eBooks Research Proposal Sample For Masters In Engineering Offers a diverse range of free eBooks across various genres. Research Proposal Sample For Masters In Engineering Focuses mainly on educational books, textbooks, and business books. It offers free PDF downloads for educational purposes. Research Proposal Sample For Masters In Engineering Provides a large selection of free eBooks in different genres, which are available for download in various formats, including PDF. Finding specific Research Proposal Sample For Masters In Engineering, especially related to Research Proposal Sample For Masters In Engineering, might be challenging as theyre often artistic creations rather than practical blueprints. However, you can explore the following steps to search for or create your own Online Searches: Look for websites, forums, or blogs dedicated to Research Proposal Sample For Masters In Engineering, Sometimes enthusiasts share their designs or concepts in PDF format. Books and Magazines Some Research Proposal Sample For Masters In Engineering books or magazines might include. Look for these in online stores or libraries. Remember that while Research Proposal Sample For Masters In Engineering, sharing copyrighted material without permission is not legal. Always ensure youre either creating your own or obtaining them from legitimate sources that allow sharing and downloading. Library Check if your local library offers eBook lending services. Many libraries have digital catalogs where you can borrow Research Proposal Sample For Masters In Engineering eBooks for free, including popular titles. Online Retailers: Websites like Amazon, Google Books, or Apple Books often sell eBooks. Sometimes, authors or publishers offer promotions or free periods for certain books. Authors Website Occasionally, authors provide excerpts or short stories for free on their websites. While this might not be the Research Proposal Sample For Masters In Engineering full book

, it can give you a taste of the authors writing style. Subscription Services Platforms like Kindle Unlimited or Scribd offer subscription-based access to a wide range of Research Proposal Sample For Masters In Engineering eBooks, including some popular titles.

### FAQs About Research Proposal Sample For Masters In Engineering Books

**What is a Research Proposal Sample For Masters In Engineering 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 Research Proposal Sample For Masters In Engineering 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 Research Proposal Sample For Masters In Engineering 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 Research Proposal Sample For Masters In Engineering 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 Research Proposal Sample For Masters In Engineering 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 Research Proposal Sample For Masters In Engineering :**

*simple ai image generator tips for creators 12717*

*affordable pilates for beginners online for workers 12761*

**pro sleep hygiene tips for small business for beginners 13888**

*expert cheap flights usa for small business 14048*

*quick matcha health benefits online for experts 13067*

**easy ai seo tools 2025 for creators 13124**

**pro content marketing strategy for small business for workers 14220**

**top method for digital nomad visa for students for workers 13592**

**pro content marketing strategy for students for creators 14530**

*top method for keyword research for small business 13869*

*affordable side hustles step plan for students 13047*

**why ai tools full tutorial for creators 13796**

**best way to sleep hygiene tips for beginners for workers 13036**

*beginner friendly home workout for moms for beginners 13899*

*best ai writing assistant step plan for students 14339*

**Research Proposal Sample For Masters In Engineering :**

*english result upper intermediate workbook - Feb 07 2023*

web dec 22 2012 this pre intermediate level book has the characteristic can do approach of the result series that gives students core language and skills they can use at work

**answer key english result upper intermediate oxford 2023 - Feb 24 2022**

*business result upper intermediate oxford university press - Aug 01 2022*

web business result upper intermediate student s book answer key 1 first impressions starting point possible answers 1 answers will vary but students might say that the

**download pdf english result upper intermediate workbook - Jul 12 2023**

web the english result upper intermediate student s book dvd enhances the classroom experience by providing culture rich video material linked to topics and language in the

[upper intermediate solutions oxford university press](#) - Apr 09 2023

web upper intermediate ak unit 1b 1 1 is currently being run 2 was completed 3 wasn t reached 4 were announced 5 was built 6 are still being added 2 7 has become 8 can even be

[biz result upp int answers business result upper intermediate](#) - May 30 2022

web keys to academic english presents academic english and its building blocks in an accessible easy to use format english result upper intermediate entry checker

[business result learning resources oxford university press](#) - Sep 14 2023

web grammar practise your grammar with exercises for each lesson study documents documents to help you study copyright oxford university press tue nov 14 22 39 42

**mckenna joe english result upper intermediate workbook** - Mar 08 2023

web 4th edition student s book answer key 3 vocabulary pronunciation music words from other languages b possible suggestions instruments trumpet triangle

**english result upper intermediate student s book** - May 10 2023

web mar 28 2010 oxford university press 2010 14 p english result upper intermediate at level b2 is a new general english course which focuses very strongly on student

**upper intermediate sb answer key upper** - Oct 15 2023

web business result intermediate practice file answer key pdf 82 kb business result pre intermediate practice file answer key pdf 91 kb business result upper

[straightforward upper intermediate workbook with answer key](#) - Sep 02 2022

web biz result upp int answers business result upper intermediate student s book answer key 1 first studocu business result book answer key first impressions

[business result upper intermediate student s book answer key](#) - Apr 28 2022

web enjoy the experience and experience the results with english result english result apr 07 2022 english result intermediate jan 16 2023 a new course with a strong

[business result upper intermediate business and english for](#) - Oct 03 2022

web aug 6 2016 business result upper intermediate 2nd edition pdf mp3 business result helps those who need to communicate better in english at work by teaching a

**answer key english result upper intermediate download only** - Jan 26 2022

[english result pre intermediate hancock mcdonald elt](#) - Dec 25 2021

**business result upper intermediate student s book s answer** - Nov 04 2022

web isbn 978 0 19 473896 5 for business professionals looking to advance their careers through improving their english  
business result second edition is a practical business

**english result upper intermediate oxford university press** - Aug 13 2023

web upper intermediate workbook answer key booklet pdf 7flne7f8ku50 oxford university press 2010 14 p english result  
upper intermediate at level b2 is a new

**english result upper intermediate pdfdrive pdf scribd** - Jun 11 2023

web 2 days ago solutions upper intermediate 2nd edition grammar speaking english workbook audio 65mb zip

**upper intermediate ak ngl life** - Jan 06 2023

web business result upper intermediate business english you can take to work today

**total english upper intermediate workbook answer key 2023** - Mar 28 2022

web the tasks texts and language focus in english result pre intermediate have been desgined to take a strong a1 level  
students to a2 on the common european

business result upper intermediate 2nd edition langpath - Jun 30 2022

web answers is ideal for classroom use or self study new adult b1 workbook w out k ey bre aug 20 2021 ng emea close up  
intermediate b1 workbook answer key

english file 4e upper intermediate sb answer key pdf scribd - Dec 05 2022

web straightforward upper intermediate workbook with answer key authors philip kerr ceri jones summary the workbook  
recycles the language and consolidates the material

**bachs kunst der fuge erscheinung und deutung serie piper** - May 24 2022

web neue forschungen zu bachs kunst der fuge buchbesprechungen musikforschung 32 1979 p153ff eggebrecht hans  
heinrich bachs kunst der fuge erscheinung und

**bachs kunst der fuge erscheinung und deutung** - Dec 31 2022

web abebooks com bachs kunst der fuge erscheinung und deutung serie piper german edition 9783492006675 by eggebrecht  
hans heinrich and a great selection

**the mathematical architecture of bach s the art** - Jun 24 2022

web abebooks com bachs kunst der fuge erscheinung und deutung 9783492182409 and a great selection of similar new used  
and collectible books available now at great

**bachs kunst fuge erscheinung zvab** - Jul 26 2022

web jan 1 1984 bachs kunst der fuge erscheinung und deutung serie piper german edition eggebrecht hans heinrich on

amazon com free shipping on qualifying

**bachs kunst der fuge erscheinung und deutung broschiert** - Apr 03 2023

web bachs kunst der fuge erscheinung und deutung hans heinrich eggebrecht isbn 3492006671 author eggebrecht hans heinrich 1919 1999 viaf edition originalausg

**bachs kunst der fuge erscheinung und deutung semantic** - Jul 06 2023

web 17 januar 2022 18 54 uhr lesezeit 3 min gorini findet in seinem spiel eine stimmige balance zwischen struktur und emotion foto marco borggreve johann sebastian

**bachs kunst der fuge erscheinung und deutung softcover** - Aug 27 2022

web j chailey l art de la fugue de j s bach étude critique des sources remise en ordre du plan analyse de l œuvre paris leduc 1971 h h eggebrecht bachs kunst der

**bachs kunst der fuge erscheinung und deutung worldcat org** - Aug 07 2023

web bachs kunst der fuge erscheinung und deutung inproceedings eggebrecht1988bachskd title bachs kunst der fuge

**bachs kunst der fuge erscheinung und deutung uniport edu** - Nov 17 2021

*bachs kunst der fuge erscheinung und deutung 4 aufl* - Jan 20 2022

web aug 6 2023 bachs kunst der fuge erscheinung und deutung 1 8 downloaded from uniport edu ng on august 6 2023 by guest bachs kunst der fuge erscheinung und

**j s bach die kunst der fuge void classics** - Sep 27 2022

web bachs kunst der fuge 5601 100 erscheinung und deutung von eggebrecht hans heinrich und eine große auswahl ähnlicher bücher kunst und sammlerstücke

**bachs kunst der fuge erscheinung und deutung amoa** - Feb 18 2022

web bachs kunst der fuge erscheinung und deutung 3 3 erscheinende bach jahrbuch ist weltweit das angesehenste publikationsorgan der internationalen bach forschung jahr

**die kunst der fuge wikipedia** - Oct 09 2023

web bachs kunst der fuge erscheinung und deutung author hans heinrich eggebrecht print book german 1998 edition 4 aufl view all formats and editions publisher f

*bachs kunst der fuge erscheinung und deutung stage gapinc* - Dec 19 2021

*bachs kunst der fuge by hans heinrich eggebrecht open library* - Nov 29 2022

web die ersten vier fugen aus die kunst der fuge geben eine knappe Übersicht über die möglichkeiten des themas in der

originalen form fugen 1 und 2 nach und nach mit

**9783492006675 bachs kunst der fuge erscheinung und** - Oct 29 2022

web bachs kunst der fuge erscheinung und deutung isbn 10 3492006671 isbn 13 9783492006675 softcover

*bachs kunst der fuge erscheinung und deutung* - Feb 01 2023

web bachs kunst der fuge by hans heinrich eggebrecht 1998 f noetzel edition in german deutsch 4 aufl

*bachs kunst der fuge erscheinung und deutung worldcat org* - Sep 08 2023

web cookies on oclc websites our web pages use cookies information about how you interact with the site when you select accept all cookies you re agreeing to let your

**bachs kunst der fuge erscheinung und deutung** - Mar 02 2023

web bachs kunst der fuge erscheinung und deutung taschenbücher zur musikwissenschaft eggebrecht hans heinrich amazon com tr

**bachs kunst der fuge erscheinung und deutung softcover** - Apr 22 2022

web 4 bachs kunst der fuge erscheinung und deutung 2022 04 30 bereichen der instrumental und gesangspädag ogik zeigen sich desiderate in bezug auf die

*die kunst der fuge von bach interpretationen von rondeau* - Jun 05 2023

web bachs kunst der fuge erscheinung und deutung heinrich eggebrecht hans isbn 9783492006675 kostenloser versand für alle bücher mit versand und verkauf duch

*wdr 3 werkbetrachtung j s bachs kunst der fuge* - May 04 2023

web auf unserer webseite werden neben den technisch erforderlichen cookies noch cookies zur statistischen auswertung gesetzt sie können die website auch ohne diese cookies

**bibliographic references to die kunst der fuge university of** - Mar 22 2022

web bachs kunst der fuge erscheinung und deutun leider kein bild vorhanden bachs kunst der fuge erscheinung und deutung 4 aufl von hans heinrich eggebrecht

*microcontroller of fifth sem in msbte 2023 old syndeohro* - May 31 2022

web microcontroller of fifth sem in msbte 8051 microcontroller pic bundle embedded system design designing embedded systems with pic microcontrollers computer organization and design risc v edition microprocessor architecture programming and applications with the 8085 technician s guide to the 68hc11 microcontroller

microcontroller of fifth sem in msbte stage gapinc - Sep 03 2022

web microcontroller of fifth sem in msbte national conference on emerging trends innovations and applications in science technology digital electronics and microcontroller applications 22421

*microcontroller of fifth sem in msbte download only* - Jul 01 2022

web microcontroller of fifth sem in msbte engineering graphics k c john 2009 07 13 this book provides a detailed study of geometrical drawing through simple and well explained worked out examples and exercises this book is designed for students of first year engineering diploma course irrespective of their branches of study the book is

**msbte 5th semester all branch lab manual mypractically** - Oct 16 2023

web may 9 2021 22502 design of steel and rcc structures22504 public health engineering22510 heat transfer operation22511 environmental technology22516 operating systems22517 advanced java programming22518 software testing22531 control systems and plc s22532 embedded systems22533 mobile and wireless

*msbte diploma lab manuals pdf download truexams* - Aug 14 2023

web oct 20 2022 msbte diploma lab manuals first semester diploma lab manuals pdf download second semester diploma lab manuals pdf download third semester diploma lab manuals pdf download fourth semester diploma lab manuals pdf download fifth semester diploma lab manuals pdf download sixth semester

**22532 embedded systems syllabus for electronics** - Mar 09 2023

web jul 26 2020 for all other diploma in electronics telecommunication engineering ej syllabus for 5th sem i scheme msbte do visit diploma in electronics telecommunication engineering ej syllabus for 5th sem i scheme msbte subjects the detailed syllabus for embedded systems is as follows

**microcontroller of fifth sem in msbte download only** - Aug 02 2022

web microcontroller of fifth sem in msbte software defined radio for engineers fundamentals of microcontrollers and applications in embedded systems with the pic18 microcontroller family

**microcontroller of fifth sem in msbte full pdf app acumed** - Apr 29 2022

web microcontroller of fifth sem in msbte designing embedded systems with arduino embedded systems with arm cortex m microcontrollers in assembly language and c third edition

**diploma in electrical engineering course code msbte news** - Sep 15 2023

web general objectives understand 8051 microcontroller architecture understand instruction set and assembly language programming understand the use of higher level language c programming to develop programs for 8051 microcontroller know the interfacing of various peripherals to 8051

**microcontroller of fifth sem in msbte barun mitra copy** - Jul 13 2023

web microcontroller of fifth sem in msbte microcontroller of fifth sem in msbte 2 downloaded from rjonline org on 2020 11 20 by guest publisher s website includes a simple embedded operating system a textbook of engineering mechanics

**microcontroller of fifth sem in msbte pdf** - Oct 04 2022

web kindly say the microcontroller of fifth sem in msbte is universally compatible with any devices to read microcontroller of fifth sem in msbte 2021 12 04 haley dillon computer organization and design risc v edition elsevier an introduction to the engineering principles of embedded systems with a focus on modeling

**microcontroller of fifth sem in msbte app savvi com** - Feb 08 2023

web microcontroller of fifth sem in msbte right here we have countless book microcontroller of fifth sem in msbte and collections to check out we additionally meet the expense of variant types and in addition to type of the books to browse *scheme g fifth semester is ic vpmthane org* - May 11 2023

web 2 microcontroller  $\beta$  mic 17534 03 02 03 100 40 50 20 25 10 3 control systems activities of professional practices iii of fifth semester and assessment of industrial training will be done in fifth semester under professional practices iii msbte final copy dt 30 10 2013 17533 is ic52 course name

**computer engineering 5th semester micro project topics** - Dec 06 2022

web sep 17 2022 cs fifth sem cs first sem cs fourth sem cs second sem cs sixth sem cs third sem ee 1st sem ee 2nd sem ee 3rd sem ee 4th sem ee 5th sem ee 6th sem formats mech fifth semester mech first sem mech fourth sem mech second sem mech sixth semester mech third sem

**msbte notes electronics 5th semester available** - Apr 10 2023

web jun 19 2023 msbte notes electronics 5th semester environmental studies 22447 control system and plc 22531 embedded systems 22532 mobile and wireless communication 22533 industrial automation 22534 microwaves and radar 22535

**microcontroller of fifth sem in msbte pdf repo inventoryclub** - Mar 29 2022

web fundamentals of microcontrollers and applications in embedded systems with the pic18 microcontroller family microcontroller of fifth sem in msbte downloaded from repo inventoryclub com

microcontroller of fifth sem in msbte download only - Feb 25 2022

web 4 microcontroller of fifth sem in msbte 2023 03 09 cloud infrastructure and the x86 cloud computing and arm mobile computing devices architectures is included an online companion web site provides advanced content for further study appendices glossary references and recommended reading features risc v the first such architecture

maharashtra state board of technical education mumbai india - Nov 05 2022

web from director s desk maharashtra state board of technical education msbte is an autonomous board of government of maharashtra mandated to regulate matters pertaining to diploma level technical education in the state

msbte micro project topics e tc 5th semester - Jun 12 2023

web sep 9 2023 msbte micro project topics e tc 5th semester environmental studies est 22447 control systems and plc csp

## **Research Proposal Sample For Masters In Engineering**

22531 embedded systems esy 22532 mobile and wireless communication mwc 22533 industrial automation iau 22534 microwave and radar mar 22535

*fifth semester syllabus polytechnic computer engineering msbte - Jan 07 2023*

web atlanta computer institute nagpur conducts tuition classes for polytechnic 5th sem computer engineering diploma in nagpur for computer engineering branch for fifth semester in nagpur india the following syllabus is of msbte final year projects training is also given to diploma students 1 software engineering 2 java programming