Importance of Core Java:-

1. 70% of any Java based interview questions are from **Core Java** only.
2. If you are not perfect in **Core Java**, the chance of getting JOB is very very less, even if you are perfect in all remaining areas.
3. If you are perfect with **Core Java**, the chance of getting JOB is very very high, even if you are not perfect in all remaining areas.
4. Knowledge of **Core Java** decides your JOB.
5. If you are strong in **Core Java**, understanding of any Java based technology becomes very easy.
6. If you are strong in **Core Java**, you can explore any new technology in Java on **your own**.
7. **Core Java** acts as the base for entire Java platform.
8. After completing all java related technologies, at the end people are thinking about **Core Java**, which represents **the importance of Core Java**.
9. Even after Getting a JOB, while working in real time, People are thinking about attending **Core Java classes** to resolve their coding struggles.
10. While working with any java based advanced Technologies (like **Struts, spring, Hibernate...**), Programmers have to write code using **Core Java only**.

Ratan sir core java highlights:-

1) complete material will be provided
2) 1000+ interview questions discussed in class room.
3) every concept with Real Time usage and scenario's.
4) every example is live execution.
5) within 10 days you are able to write core java applications in class room.
6) register in one batch attend multiple batches.
7) dependent languages and technologies on corejava.
   Hadoop,cloud computing,selenium Testing ,OCJP, advjava ,structs ,spring ,web-services ,android ,JSF ......etc
8) every software engineer common   prerequisite course is corejava.

Note-1 :- Ratan sir student able to answer all the question placed in this book.
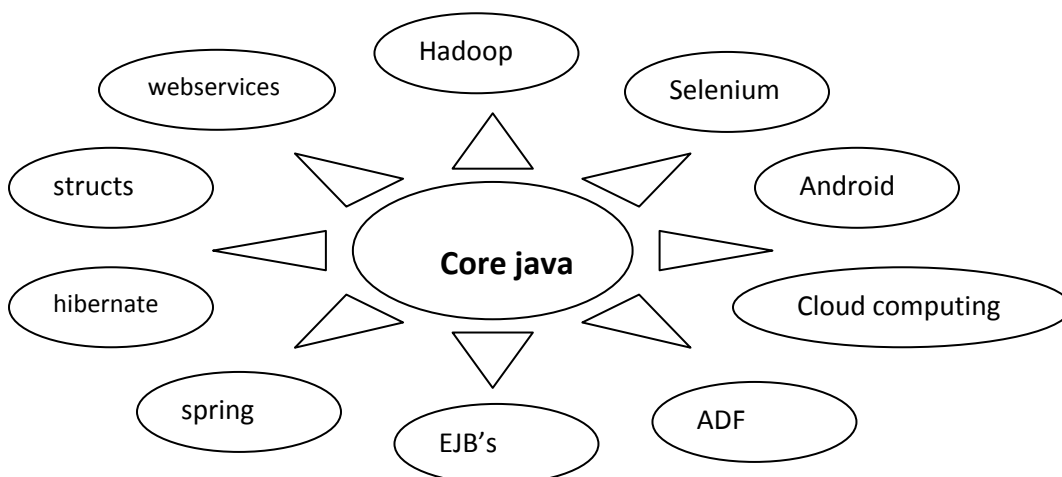Note -2:- if you know all the interview questions then say you are prefect in java.
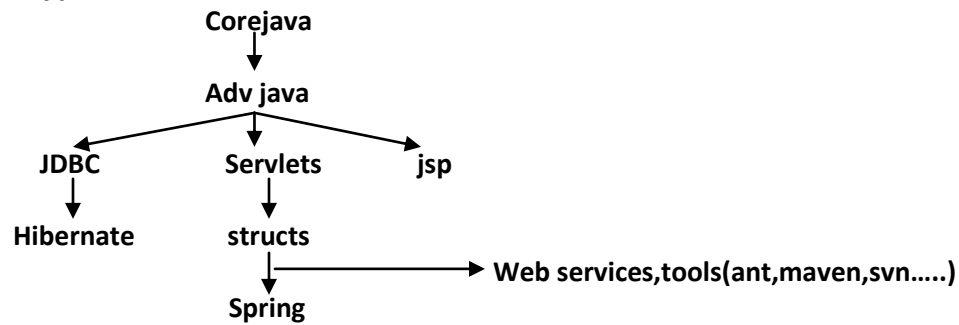
JAVA introduction:-

Author	:	**James Gosling**
Vendor	:	Sun Micro System(*which has since [merged into Oracle Corporation](#)*)
Project name	:	Green Project
Type	:	open source & free software
Initial Name	:	OAK language
Present Name	:	java
Extensions	:	.java & .class & .jar
Initial version	:	jdk 1.0 (java development kit)
Present version	:	J2SE 8 2014
Operating System	:	multi Operating System
Implementation Lang	:	c, cpp……
Symbol	:	coffee cup with saucer
Objective	:	To develop web applications
SUN	:	**Stanford Universally Network**
Slogan/Motto	:	WORA(write once run anywhere)

Importance of core java:-

According to the SUN 3 billion devices run on the java language only.

1) Java is used to develop Desktop Applications such as MediaPlayer,Antivirus etc.
2) Java is Used to Develop Web Applications such as durgajobs.com, irctc.co.in etc.
3) Java is Used to Develop Enterprise Application such as Banking applications.
4) Java is Used to Develop Mobile Applications.
5) Java is Used to Develop Embedded System.
6) Java is Used to Develop SmartCards.
7) Java is Used to Develop Robotics.
8) Java is used to Develop Games   **etc.**

Technologies Depends on Core java:-

Learning process of java:-

```
                        Corejava

                        Adv java

        JDBC          Servlets          jsp

     Hibernate        structs

                         ↓         ────────→  Web services,tools(ant,maven,svn…..)
                       Spring
```

Java keywords:- [must know information about all the keywords with example]

Data Types	flow-control	Exception-handling	object-level	modifiers
byte	if	try	new	public
short	else	catch	this	private
int	switch	finally	super	protected
long	case	throw	instanceof	final
float	default	throws	**(4)**	static
double	break	**(5)**	**1.5 version**	abstract
char	while	**source-file**	assert	synchronized
Boolean	do	class	enum	volatile
(8)	continue	extends	**(2)**	native
Unused	**(10)**	interface	**method-level**	**(11)**
goto		implements	void	
const		package	return	
(2)		import	**(2)**	
		(6)		

JAVA VERSIONS:-

VERSION		YEAR
Java Alpha & beta	:	1995
JDK 1.0	:	1996
JDK1.1	:	1997
J2SE 1.2	:	1998
J2SE 1.3	:	2000
J2SE 1.4	:	2002
J2SE 1.5	:	2004
JAVA SE 6	:	2006
JAVA SE 7	:	2011
JAVA SE 8	:	2014

Parts of the java:-

As per the **sun micro system** standard the java language is divided into three parts

1) J2SE/JSE(JAVA 2 STANDARD EDITION)
2) J2EE/JEE(JAVA 2 ENTERPRISE EDITION)
3) J2ME/JME(JAVA 2 MICRO EDITION)

Java Class declaration interview questions

1) What is present version of java and initial version of java?
2) How many modifiers in java and how many keywords in java?
3) What is initial name of java and present name of java?
4) Can we have multiple public classes in single source file?
5) Can we create multiple objects for single class?
6) What do you mean by token and literal?
7) What do you mean by identifier?
8) Is it possible to declare multiple public classes in single source file?
9) What is the difference between editor and IDE(integrated development environment)
10) Write the examples of editor and IDE?
11) Define a class?
12) In java program starts form which method and who is calling that method?
13) What are the commands required for compilation and execution?
14) Can we compile multiple source files at a time and is it possible to execute multiple .classes at a time?
15) The compiler understandable file format and JVM understandable file format?
16) What is the difference between JRE and JDK?
17) What is the difference between path and class path?
18) What is the purpose of environmental variables setup?
19) What do you en by open source software?
20) What are operations done at compilation time and execution time?
21) What is the purpose of JVM?
22) JVM platform dependent or independent?
23) In java program execution starts from?
24) How many types of commands in java and what is the purpose of commands?
25) Is it possible to provide multiple spaces in between two tokens?
26) Class contains how many elements based on Ratan sir class notes?
27) Source file contains how many elements?
28) What are dependent languages and technologies in market on java?
29) Who is generating .class file and .class files generation is based on what?
30) What is .class file contains?
31) What is the purpose of data types and how many data types are present in java?
32) Who is assigning default values to variables?
33) What is the default value of int, char, Boolean, double?
34) Is null is a keyword or not?
35) What do you mean by main class?
36) Is it possible to declare multiple classes with main method?
37) Can I have multiple main methods in single class?
38) What is the default package in java?
39) Can I import same class twice yes-→what happened no -→why ?
40) Do I need to import java.lang package ? yes --->why   no--->why?
41) Is empty java source file is valid or not?
42) Is it java file contains more than one class?
43) What is the purpose of variables in java?
44) How many types of variables in java and what are those variables?
45) What is the life time of static variables and where these variables are stored?
46) What is the life time of instance variables and where these variables are stored?

47) What is the life time of local variables and where these variables are stored?
48) For the static members when memory is allocated?
49) Where we declared local variables & instance variables & static variables
50) For the instance members when memory is allocated?
51) For the local variables when memory is allocated?
52) What is the difference between instance variables and static variables?
53) Can we declare instance variables inside the instance methods and static variables inside the static method?
54) If the local variables of methods and class instance variables having same names at that situation how we are represent local variables and how are representing instance variable?
55) What do you mean by method signature?
56) What do you mean by method implementation?
57) How many types of methods in java and how many types of areas in java?
58) What is the purpose of template method?
59) Can we have inner methods in java?
60) One method is able to call how many methods at time?
61) For java methods return type is mandatory or optional?
62) Who will create and destroy stack memory in java?
63) When we will get stackoverFlowError?
64) Is it possible to declare return statement any statement of the method or any specific rule is there?
65) When we will get "variable might not have been initialized" error message?
66) What are the coding conventions of classes and interfaces?
67) What are the coding conventions of methods and variables?
68) What is the default package in java programming?
69) Platform dependent vs platform independent?
70) Is java a object oriented programming language?
71) By using which keyword we are creating object in java?
72) Object creation syntax contains how many parts?
73) How many types of constructors in java?
74) How one constructor is calling another constructor? One constructor is able to call how many constructors at time?
75) What do you mean by instantiation?
76) What is the difference between object instantiation and object initialization?
77) How many ways to create a object in java?
78) What is the purpose of this keyword?
79) Is it possible to use this keyword inside static area?
80) What is the need of converting local variables to instance variables?
81) Is it possible to convert instance variables to local variables yes→how   no-→why?
82) When we will get compilation error like "call to this must be first statement in constructor"?
83) When we will get compilation error line "cannot find symbol"?
84) What do u mean by operator overloading, is it java supporting operator overloading concept?
85) What is the purpose of scanner class and it is present in which package and introduced in which version?
86) What do you mean by constructor?
87) Who is generating default constructor and at what time?
88) What is the difference between named object and nameless object and write the syntax ?
89) What is object and what is relationship between class and Object?

90) Is it possible to execute default constructor and user defined constructor time?
91) If we are creating object by using new operator at that situation for every object creation how many constructors are executed?
92) What do you mean by object delegation?
93) What is the purpose of instance blocks when it will execute?
94) Inside class it is possible to declare how many instance blocks and what is syntax?
95) What is execution flow of method VS constructor Vs instance blocks Vs static blocks?
96) When instance blocks and static blocks are executed?
97) What are the new features of java1.5 version VS java1.6 VS java 1.7 VS java 8?

Flow control statement

1) *How many flow control statements in java?*
2) *What is the purpose of conditional statements?*
3) *What is the purpose of looping statements?*
4) *What are the allowed arguments of switch?*
5) *When we will get compilation error like "possible loss of precision"?*
6) *Inside the switch case vs. default vs. Break is optional or mandatory?*
7) *Switch is allowed String argument or not?*
8) *Inside the switch how many cases are possible and how many default declarations are possible?*
9) *What is difference between if & if-else & switch?*
10) *What is the default condition of for loop?*
11) *Inside for initialization & condition & increment/decrement parts optional or mandatory?*
12) *When we will get compilation error like "incompatible types"?*
13) *We are able to use break statements how many places and what are the places?*
14) *What is the difference between break& continue?*
15) *What do you mean by transfer statements and what are transfer statements present in java?*
16) *for (; ;) representing?*
17) *When we will get compilation error like "unreachable statement "?*
18) *Is it possible to declare while without condition yes -→what is default condition no→what is error?*
19) *What is the difference between while and do-while?*
20) *While declaring if , if-else , switch curly braces are optional or mandatory?*

Oops

1) What are the main building blocks of oops?
2) What do you mean by inheritance?
3) How to achieve inheritance concept and inheritance is also known as?
4) How many types of inheritance in java and how many types of inheritance not supported by java?
5) How to prevent inheritance concept?
6) What is the purpose of extends keyword?
7) What do you mean by cyclic inheritance java supporting or not?
8) What is the difference between child class and parent class?
9) What is the root class for all java classes?
10) Inside the constructor if we are not providing this() and super() keyword the compiler generated which type of super keyword?
11) How to call super class constructors?
12) Is it possible to use both super and this keyword inside the method?
13) Is it possible to use both super and this keyword inside the constructor?
14) If the child class and parent class contains same variable name that situation how to call parent class variable in child class?
15) One class able to extends how many classes at a time?
16) If we are extending the your class will become parent class if we are not extending what is the parent class?
17) What do you mean by aggregation and what is the difference between aggregation and inheritance?
18) What do you mean by aggregation and composition and Association?
19) Aggregation is also known as?
20) How many objects are created ?
    a. MyClassHero c1,c2;
                  C1 = New MyClassHero();
21) What is the root class for all java classes?
22) Which approach is recommended to create object either parent class object or child class object?
23) Except one class all class contains parent class in java what is that except class?
24) What is the purpose of instance of keyword in java?
25) What do you mean by polymorphism?
26) What do you mean by method overloading and method overriding?
27) How many types of overloading in java?
28) Is it possible to override variable in java?
29) What do you mean by constructor overloading?
30) What are rules must fallow while performing method overriding?
31) When we will get compilation error like "overridden method is final"?
32) What is the purpose of final modifier java?
33) Is it possible to override static methods yes-→how no-→why?
34) Parent class reference variable is able to hold child class object?
35) How many types of polymorphism in java?
36) What do you mean by dynamic method dispatch?
37) The applicable modifiers for local variables?

38) Is it all methods present in final class is always final and is it all variables present final class is always final?
39) If Parent class is holding child class object then by using that we are able to call only overridden methods of child class but how to call direct methods of child class?
40) Object class contains how many methods?
41) When we will get compilation error like "con not inherit from final parent"?
42) How many types of type casting in java?
43) What do you mean by co-variant return types?
44) What do u mean by method hiding?
45) What do you mean by abstraction?
46) How many types of classes in java?
47) Normal class is also known as ?
48) What is the difference between normal method and abstract method?
49) What is the difference between normal class and abstract class?
50) Is it possible to create a object for abstract class?
51) What do you mean by abstract variable?
52) Is it possible to override non-abstract method as a abstract method?
53) Is it possible to declare main method inside the abstract class or not?
54) What is the purpose of abstract modifier in java?
55) How to prevent object creation in java?
56) What is the definition of abstract class?
57) In java is it abstract class reference variable is able to hold child class object?
58) What do you mean by encapsulation?
59) What do you mean by tightly encapsulated class?
60) What do you mean accessor method and mutator method ?
61) How many ways area there to set some values to class properties?
62) Can we overload method?
63) Can we inherit main method in child class?
64) In java main method is called by ?
65) The applicable modifiers on main method?
66) While declaring main method public static modifiers order mandatory or optional?
67) What is the argument of main method?
68) What is the return type of main method?
69) What are the mandatory modifiers for main method and optional modifiers of main method?
70) Why main method is static?
71) What do you by command line arguments?
72) Is it possible to pass command line arguments with space symbol no→ good yes→how ?
73) What is the purpose of strictfp classes?
74) What is the purpose of strictfp modifier?
75) What is the purpose of native modifier?
76) What do you mean by native method and it also known as?
77) What do you mean by javaBean class?
78) The javabean class is also known as?
79) Applicable modifiers on local variables?
80) What is the execution process of constructors if two classes are there in inheritance relationship?

81) What is the execution process of instance blocks if two classes are there in inheritance relationship?
82) What is the execution process of static blocks if two classes are there in inheritance relationship?
83) What is the purpose of instanceof operator in java & what is the return-type?
84) If we are using instanceof both reference-variable & class-name must have some relationship otherwise compiler generated error message is what?

Packages

1. What do you mean by package and what it contains?
2. What is the difference between user defined package and predefined package?
3. What are coding conventions must fallow while declaring user defined package names?
4. Is it possible to declare motile packages in single source file?
5. What do you mean by import?
6. What is the location of predefined packages in our system?
7. How many types of imports present in java explain it?
8. How to import individual class and all classes of packages and which one is recommended?
9. What do you mean by static import?
10. What is the difference between normal and static import?
11. Is it possible to import multiple packages in single source file?
12. Is it possible to declare multiple packages in single source file?
13. I am importing two packages, both packages contains one class with same name at that situation how to create object of two package classes?
14. If we are importing root package at that situation is it possible to use sub package classes in our applications?
15. What is difference between main package and sub package?
16. If source file contains package statement then by using which command we are compiling that source file?
17. What do you mean by fully qualified name of class?
18. What is the public modifier?
19. What is the default modifier in java?
20. What is the public access and default access?
21. What is private access and protected access?
22. What is the difference between public methods and default method?
23. What is the difference between private method and protected method?
24. What is most restricted modifier in java?
25. What is most accessible modifier in java?

Exception handling

1. What do you mean by Exception?
2. How many types of exceptions in java?
3. What is the difference between Exception and error?
4. What is the difference between checked Exception and un-checked Exception?
5. Checked exceptions are caused by?
6. Unchecked exceptions are caused by?
7. Errors are caused by?
8. Is it possible to handle Errors in java?
9. What the difference is between partially checked and fully checked Exception?
10. What do you mean by exception handling?
11. How many ways are there to handle the exception?
12. What is the root class of Exception handling?
13. Can you please write some of checked and un-checked exceptions in java?
14. What are the keywords present in Exception handling?
15. What is the purpose of try block?
16. In java is it possible to write try without catch or not?
17. What is the purpose catch block?
18. What is the difference between try-catch?
19. Is it possible to write normal code in between try-catch blocks?
20. What are the methods used to print exception messages?
21. What is the purpose of printStackTrace( ) method?
22. What is the difference between printStackTrace( ) & getMessage()?
23. What is the purpose of finally block?
24. If the exception raised in catch block what happened?
25. Independent try blocks are allowed or not allowed?
26. Once the control is out of try , is it remaining statements of try block is executed?
27. Try-catch , try-catch-catch , catch-catch , catch-try how many combinations are valid?
28. Try-catch-finally , try-finally ,catch-finally , catch-catch-finally how many combinations are valid?
29. Is possible to write code in between try-catch-finally blocks?
30. Is it possible to write independent catch blocks?
31. Is it possible to write independent finally block?
32. What is the difference between try-catch –finally?
33. What is the execution flow of try-catch?
34. If the exception raised in finally block what happened?
35. What are the situations finally block is executed?
36. What are the situations finally block is not executed?
37. What is the purpose of throws keyword?
38. What is the difference between try-catch blocks and throws keyword?
39. What do you mean by default exception handler and what is the purpose of default exception handler?

40. How to delegate responsibility of exception handling calling method to caller method?
41. What is the purpose of throw keyword?
42. If we are writing the code after throw keyword usage then what happened?
43. What is the difference between throw and throws keyword?
44. How to create user defined checked exceptions?
45. How to create user defined un-checked exceptions?
46. Where we placed clean-up code like resource release, database closeting inside the try or catch or finally and why ?
47. Write the code of ArithmeticException?
48. Write the code of NullPointerException?
49. Write the code of ArrayIndexOutOfBoundsException & StringIndexOutOfBoundsException?
50. Write the code of IllegalThreadStateException?
51. When we will get InputMisMatchException?
52. When we will get IllegalArgumantException?
53. When we will get ClassCastException?
54. When we will get OutOfMemoryError?
55. When we will get compilation error like "unreportedException must be catch"?
56. When we will get compilation error like "Exception XXXException has already been caught"?
57. When we will get compilation error like "try without catch or finally"?
58. How many approaches are there to create user defined unchecked exceptions and un-checked exceptions?
59. What do you mean by exception re-throwing?
60. How to create object of user defined exceptions?
61. How to handover user created exception objects to JVM?
62. What is the difference user defined checked and unchecked Exceptions?
63. Is it possible to handle different exceptions by using single catch block yes-->how no➔why?

Interfaces

a. What do you mean by interface how to declare interfaces in java?

b. Interfaces allows normal methods or abstract methods or both?

c. For the interfaces compiler generates .class files or not?

d. Interface is also known as?

e. What is the abstract method?

f. By default modifiers of interface methods?

g. What is the purpose of implements keyword?

h. Is it possible to declare variables in interface ?

i. Can abstract class have constructor? can interface have constructor?

j. What must a class do to implement interface?

k. What do you by implementation class?

l. Is it possible to create object of interfaces?

m. What do you mean by abstract class?

n. When we will get compilation error like "attempting to assign weaker access privileges"?

o. What is the difference between abstract class and interface?

p. What do you mean by helper class?

q. Which of the fallowing declarations are valid & invalid?

      a. class   A   implements it1

      b. class   A   implements it1,it2,it3

      c. interface it1 extends it2

      d. interface it1 extends it2,it3

      e. interface it1 extends A

      f. interface it1 implements A

r. what is the difference between classes and interfaces?

s. The interface reference variable is able to hold implementation class objects or not?

      a. Interface-name   reference-variable = new implementation class object();   valid or invalid

t. What is the real-time usage of interfaces?

u. what is the limitation of interfaces how to overcome that limitation?

v. What do you mean by adaptor class?

w. What is the difference between adaptor class interfaces?

x. Is it possible to create user defined adaptor classes?

y. Tell me some of the adaptor classes?

z. What do you mean by marker interface and it is also known as?

aa. Tell me some of the marker interfaces?

bb. What are the advantages of marker interfaces?

cc. Is it possible to create user defined marker interfaces /

dd. What do you mean nested interface?

Different types of methods in java (must know information about all methods)

1) Instance method
2) Static method
3) Normal method
4) Abstract method
5) Accessor methods
6) Mutator methods
7) Inline methods
8) Call back methods
9) Synchronized methods
10) Non-synchronized methods
11) Overriding method
12) Overridden method
13) Factory method
14) Template method
15) Default method
16) Public method
17) Private method
18) Protected method
19) Final method
20) Strictfp method
21) Native method

Different types of classes in java (must know information about all classes)

1) Normal class /concrete class /component class
2) Abstract class
3) Tightly encapsulated class
4) Public class
5) Default class
6) Adaptor class
7) Final class
8) Strictfp class
9) JavaBean class /DTO(Data Transfer Object) /VO (value Object)/BO(Business Object)
10) Singleton class
11) Child class
12) Parent class

13) Implementation class

<u>Different types of variables in java (must know information about all varaibles)</u>

1) Local variables

2) Instance variables

3) Static variables

4) Final variables

5) Private variables

6) Protected variables

7) Volatile variables

8) Transient variables

9) Public variables

String manipulation

1) How many ways to create a String object & StringBuffer object?
2) What is the difference between
     a. String str="ratan";
     b. String str = new String("ratan");
3) equals() method present in which class?
4) What is purpose of String class equals() method.
5) What is the difference between equals()   and == operator?
6) What is the difference between by immutability & immutability?
7) Can you please tell me some of the immutable classes and mutable classes?
8) String & StringBuffer & StringBuilder & StringTokenizer presented package names?
9) What is the purpose of String class equals() & StringBuffer class equals()?
10) What is the purpose of StringTokenizer nd this class functionality replaced method name?
11) How to reverse String class content?
12) What is the purpose of trim?
13) Is it possible to create StringBuffer object by passing String object as a argument?
14) What is the difference between concat() method & append()?
15) What is the purpose of concat() and toString()?
16) What is the difference between StringBuffer and StringBuilder?
17) What is the difference between String and StringBuffer?
18) What is the difference between compareTo() vs eqauls()?
19) What is the purpose of contains() method?
20) What is the difference between length vs length()?
21) What is the default capacity of StringBuffer?
22) What do you mean by factory method?
23) Concat() method is a factory method or not?
24) What is the difference between heap memory and String constant pool memory?
25) String is a final class or not?
26) StringBuilder and StringTokenizer introduced in which versions?
27) What do you mean by legacy class & can you please give me one example of legacy class?
28) How to apply StringBuffer class methods on String class Object content?
29) When we use String & StringBuffer & String
30) What do you mean by cloneaing and use of cloning?

31) Who many types of cloneaing in java?
32) What do you mean by cloneable interface present in which package and what is the purpose?
33) What do you mean by marker interface and Cloneable is a marker interface or not?
34) How to create duplicate object in java(by using which method)?

Wrapper classes

1. What is the purpose of wrapper classes?
2. How many Wrapper classes present in java what are those?
3. How many ways are there to create wrapper objects?
4. When we will get NumberFormatException?
5. How many constructors are there to create Character Wrapper class Object ?
6.   How many constructors are there to create Integer Wrapper class?
7. How many constructors are there to create Float Wrapper class?
8. What do you mean by factory method?
9. What is the purpose of valueOf() method is it factory method or not?
10. How to convert wrapper objects into corresponding primitive values?
11. What is the implementation of toString() in all wrapper classes?
12. How to convert String into corresponding primitive?
13. What do you mean by Autoboxing and Autounboxng & introduced in which version?
14. Purpose of parseXXX() & xxxValue() method?
15. Which Wrapper classes are direct child class of Object class?
16. which Wrapper classes are direct child class of Number class?
17. How to convert primitive to String?
18. When we will get compilation error like "int cannot be dereferenced"?
19. Wrapper classes are immutable classes or mutable classes?
20. Perform fallowing conversions int--->String   String--->int   Integer--->int   int--->Integer ?

Garbage Collector

1. What is the functionality of Garbage collector?
2. How many ways are there to make eligible our objects to Garbage collector?
3. How to call Garbage collector explicitly?
4. What is the purpose of gc( ) method?
5. What is the purpose of finalize() method?
6. If the exception raised in finalize block what happened **error or output?**
7. What is the purpose of RunTime class?
8. How to create object of RunTime class?
9. What is singleton class?
10. What is the algorithm fallowed by GC?
11. What is the difference between final , finally , finalize()?
12. When GarbageCollector calls finalize()?
13. Finalize method present in which class?
14. Which part of the memory involved in garbage collector Heap or Stack?
15. Who creates stack memory and who destroy that memory?
16. What do you mean by demon thread? Is Garbage collector is DemonThread?
17. How many times Garbage collector does call finalize() method for object?
18. What are the different ways to call Garbage collector ?
19. How to enable/disable call of finalize()?
20. Is it possible to call finalize() method explicitly by the programmer?

Collections

1) What is the main objective of collections?
2) What are the advantages of collections over arrays?
3) Collection frame work classes are present in which package?
4) What is the root interface of collections?
5) List out implementation classes of List interface?
6) List out implementation classes of set interface?
7) List out implementation classes of map interface?
8) What is the difference between heterogeneous and homogeneous data?
9) What do you mean by legacy class can you please tell me some of the legacy classes present in collection framework?
10) What are the characteristics of collection classe?
11) What is the purpose of generic version of collection classes?
12) What is the difference between general version of ArrayList and generic version of ArrayList?
13) What is purpose of generic version of ArrayList & arrays?
14) How to get Array by using ArrayList?
15) What is the difference betweenArrayList and LinkedList?
16) How to decide when to use ArrayList and when to use LinkedList?
17) What is the difference between ArrayList & vector?
18) How can ArrayList be synchronized without using vector?
19) Arrays are already used to hold homogeneous data but what is the purpose of generic version of Collection classes?
20) What is the purpose of RandomAccess interface and it is marker interface or not?
21) What do you mean by cursor and how many cursors present in java?
22) How many ways are there to retrieve objects from collections classes what are those?
23) What is the purpose of Enumeration cursor and how to get that cursor object?
24) By using how many cursors we are able to retrieve the objects both forward backward direction and what are the cursors?
25) What is the purpose of Iterator and how to get Iterator Object?
26) What is the purpose of ListIterator and how to get that object?
27) What is the difference between Enumeration vs Iterator Vs ListIterator?
28) We are able to retrieve objects from collection classes by using cursors and for-each loop what is the difference?
29) All collection classes are commonly implemented some interfaces what are those interfaces?
30) What is the difference between HashSet & linkedHashSet?
31) all most all collection classes are allowed heterogeneous data but some collection classes are not allowed can you please list out the classes?
32) What is the purpose of TreeSet class?
33) What is the difference between Set & List interface?
34) What is the purpose of Map interface?
35) What do you mean by entry.
36) What is the difference between HashMap & LinkedHashMap?
37) What is the difference between comparable vs Comparator interface?
38) What is the difference between TreeSet andTtreeMap?
39) What is the difference between HashTable and Properties file key=value pairs?
40) What do you mean by properties file and what are the advantages of properties file?
41) Properties class present in which package?
42) What is the difference between collection & collections?

Enumeration
1) What is the purpose Enumeration?
2) How to declare enum?
3) enum constants are by default?
4) One enum is able extends other enum or not?
5) For the enum compiler generate .class files or not?
6) What is the difference enum & Enum?
7) Is it possible to declare main method & constructor inside the enum or not?
8) Is it possible to provide parameterized constructor inside the enum?
9) What is the difference between enum and class?
10) What is the purpose of values() methods?
11) What is the purpose of ordinal() method?
12) Is it possible to crate object for enum?
13) For enum inheritance concept is applicable or not?
14) Is it possible to create object of enum?
15) When enum constants are loaded?
16) Enums are able to implement interfaces or not?
17) Enum introduced in which version?
18) What is the difference between **enum & Enumeration & Enum?**
19) Is it possible to override toString() method inside enum?
20) Can you use enum constants switch case in java?

Nested classes
1) What are the advantages of inner classes?
2) How many types of nested class?
3) How many types of inner classes?
4) What do you by static inner classes?
5) The inner class is able to access outer class private properties or not?
6) The outer class is able to access inner classes properties& methods or not?
7) How to create object inner class and outer class?
   a. Class Outer
      {   class Inner{ }
      }
8) For the inner classes compiler generates .class files or not? If generates write the name of above inner class .class file name ?
9) The outer class object is able to call inner class properties & methods or not?
10) The inner class object is able to call outer class properties and methods or not?
11) What is the difference between normal inner classes and static inner classes?
12) What do you mean by anonymous inner classes?
13) What do you mean by method local inner classes?
14) Is it possible to create inner class object without outer class object?
15) Java supports inner method concept or not ?
16) Is it possible to declare main method inside inner classes?
17) Is it possible to declare constructors inside inner classes?
18) If outer class variables and inner class variables are having same name then hoe to represent outer class variables and how to represent inner class variables?
19) Is it possible to declare same method in both inner class and outer class?
20) Is it possible to declare main method inside outer classes?

File IO

1. What is the purpose of java.io package?
2. What do you mean by stream?
3. What do you mean by channel and how many types of channels present in java?
4. What is the difference between normal stream & buffered Streams?
5. What is the difference between FileInputStream & BufferedReader?
6. What is the difference between FileOutputStream & printwriter?
7. Println() method present in which class?
8. Out is which type of variable(instance /static) present in which class?
9. To create byte oriented channel we required two class what are those classes?
10. To create character oriented channel we required two class what are those classes?
11. What is the difference between byte oriented channel and character oriented channel?
12. What is the difference between read() & readLine() method?
13. What do you mean by serialization?
14. What is the purpose of Serializable interface& it is marker interface or not ?
15. How to prevent serialization concept?
16. What do you mean deserialization?
17. To perform deserialization we required two classes what are those classes?
18. To perform serialization we required two classes what are those classes?
19. What is the purpose of transient modifier?
20. What are advantage of serialization?
21. Serializable interface present in which package?
22. When we will get IOException how many ways are there to handle the exceptions?
23. IOException is checked Exception or unchecked Exception?

Multhreading

1. What do you mean by Thread?
2. What do you mean by single threaded model?
3. What is the difference single threaded model and multithreaded model?
4. What do you mean by main thread and what is the importance?
5. What is the difference between process and thread?
6. How many ways are there to create thread which one prefer?
7. Thread class& Runnable interface present in which package?
8. Runnable interface is marker interface or not?
9. What is the difference between t.start() & t.run() methods where t is object of Thread class?
10. How to start the thread?
11. What are the life cycle methods of thread?
12. Run() method present in class/interface ?Is it possible to override run() method or not?
13. Is it possible to override start method or not?
14. What is the purpose of thread scheduler?
15. Thread Scheduler fallows which algorithm?
16. What is purpose of thread priority?
17. What is purpose of sleep() & isAlive() & isDemon() & join() & getId() & activeCount() methods?
18. Jvm creates stack memory one per Thread or all threads only one stack?
19. What is the thread priority range & how to set priority and how to get priority?

20. What is the default name of user defined thread and main thread? And how to set the name and how to get the name?
21. What is the default priority of main thread?
22. Which approach is best approach to create a thread?
23. What is the difference between synchronized method and non-synchronized method?
24. What is the purpose of synchronized modifier?
25. What is the difference between synchronized method and non synchronized method?
26. What do you mean by demon thread tell me some examples?
27. what is the purpose of volatile modifier?
28. What is the difference between synchronized method and synchronized block?
29. Wait() notify() notifyAll() methods are present in which class?
30. When we will get Exception like "IllegalThreadStateException" ?
31. When we will get Exception like "IlleglArgumentException" ?
32. If two threads are having same priority then who decides thread execution?
33. How two threads are communicate each other?
34. What is race condition?
35. How to check whether the thread is demon or not? Main thread is demon or not?
36. How a thread can interrupt another thread?
37. Explain about wait() notify() notifyAll()?
38. Once we create thread what is the default priority?
39. What is the max priority & min priority & norm priority?
40. What is the difference between preemptive scheduling vs time slicing?