

CORE JAVA INTERVIEW QUESTIONS**Q.1] what all data types you know in java?**

Ans:- There are, two categories of data types:

- Primitive data type
- User defined data type

➤ Primitive Data type:-

It is predefined type of data and is supported by java.

There are 8 primitive data type.

- 1) Byte
- 2) Short
- 3) Int
- 4) Long
- 5) Float
- 6) Double
- 7) Char
- 8) Boolean

Q.2] Can you give size required for each data type?

Ans:-

data type	Size
byte , boolean	1 byte
char, short	2 byte
int , float	4 byte
long, double	8 byte

Q.3] what is default value of data type.

Ans:-

Data type	Default Value
byte	0
short	0
int	0
long	0L
float	0.0f
double	0.0d
char	Blank
boolean	false

Q.4] Is String data type?

Ans:- No, string is not a data type, but

- I. String is class which is present in **java.Lang** package.
- II. String class is used to create string object.
- III. String is an array of character so it is not a primitive data type.

I. String is class which is present in `java.lang` package.

II. String class is used to create string object.

III. String is an array of character so it is not a primitive data type.

www.jbktutorial.com
www.jbktutorial.com

www.thekiranacademy.com

Core Java Interview Questions

Q.5] Can you define class?

Ans:- 1) Class is object oriented concept in java.

2) Variable, method, block and constructor are members of class. Which are present inside the class?

3) Class is also called as blueprint /logical entity.

4) Class does not occupy memory.

Q.6] Can You define object?

Ans: - The object is an instance of a class

The object is an entry which has state and behavior

An object is real -world & runtime entry.

Q. 7] Can you list out some inbuilt classes in java?

Ans:-

1	System	11	Thread
2	Object	12	ArrayList
3	Integer	13	Exception
4	String	14	Arrays
5	Error	15	Scanner
6	Reader	16	Iterator
7	Writer	17	Runnable
8	Static(inner class)		
9	Final		
10	Inner Class		

Q.8] what is difference between global and local Variable?

Ans:-

	Global Variable	Local Variable
1	Scope of global variable is outside the method / across the method	Scope of the local variable is within a method
2	Global variable can be static	Local variable cannot be static
3	Global variable can be private	Local variable cannot be private
4	Variable are present within the class and outside the method	Variable are present inside the method

Q.9] can class be a return type of any method?

Ans: Yes, Class can be a return type of any method but in that case we have to initiate with new keyword & its constructor

```
Ex: class A
{
    A m1 ();
    {
        return new A ();
    }
}
```

www.jbktutorial.com
www.jbktutorial.com

www.thekiranacademy.com

Core Java Interview Questions

}

Q.10] what is block in Java? What is its Syntax? When is it getting executed?

Ans: A block in Java is a set of code enclosed within curly braces {} within any class, method or constructor.it begins with an opening brace ({) and end with closing braces (})

Syntax:-

```
Public class student
{
    // block start
```

```
Ex: class A
{
    A m1 ();
{
return new A ();
}
```

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

}

Q.10] what is block in Java? What is its Syntax? When is it getting executed?

Ans: A block in Java is a set of code enclosed within curly braces {} within any class, method or constructor. It begins with an opening brace () and ends with closing braces ()

Syntax:-

```
Public class student
{ // block start
    // class body
} // block end
```

Q.11] what is super classes in java?

Ans: i. The class named Object is the super class of all classes in Java.
ii. Object class comes under the Java Lang package

Some methods in object class are as follows

```
a> getClass()
b> hashCode()
c> toString()
d> equals()
e> clone()
```

Q.12] what is package and import keyword?

Ans:- Package is nothing but a folder where we create classes OR a package in Java is a mechanism to contain classes, subclasses

```
package com.tcs.icici.loan;
```

In above example

- Folder starts with 'com'
- Subfolder is 'tcs'. This is name of company
- icici is client name
- loan is project name

Import Keyword -

If we want to create multiple classes with the same name then we can create those classes in different packages and use those classes with their package name and if we want use same classes and members of class which are present in different packages then we should import that package and the members.

poojagaval1666@gmail.com
+919158787320

Q.13] Can we give fully qualified class name instead of importing those classes? If yes how to do what?

Ans:- Yes, We can give fully qualified class name instead of importing those classes.

We have to give that fully qualified class name at the time of object creation.

```
com.javabykiran.customer cu=new com.javabykiran();
```

Q.14] what are access specifier / modifier available in Java explain each of them in details?

Ans:- There are 4 access specifier / modifier in Java

- 1) public
- 2) private
- 3) default
- 4) protected

- Public :- 1. we can create all members of class as public.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

2. Access level or scope of public is everywhere.

- Private :- 1. Scope of private is within those members.
2. Local variable cannot be private.
3. Constructor cannot be private.
4. Private can apply to global variable.

We have to give that fully qualified class name at the time of object creation.

```
com.javabykiran.customer cu=new com.javabykiran();
```

Q.14] what are access specifier / modifier available in java explain each of them in details?

Ans:- There are 4 access specifier / modifier in java
 1)public 2)private 3)default 4)protected

- Public :- 1. we can create all members of class as public.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

2. Access level or scope of public is everywhere.

- Private :- 1. Scope of private is within those members.
 2. Local variable cannot be private.
 3. Constructor cannot be private.
 4. Private can apply to global variable.
 5. Class cannot be private but inner class can be private.
- Default :- 1.Default can apply to variables, method, constructors and classes.
 2. Scope of default is within a package.
- Protected :- 1. Protected can apply to variable, methods and inner class
 2. Access level is within package as well outside package by using sub-class.

Q.15] Can you elaborate protected access specifier in Java?

Ans :- We can apply protected access specifier to
 1. Variable 2.members 3.inner classes

Commonly access level of protected is within a package but if we want to use that members in different package then we have to import that package in current package and extends the class where protected members are presence and create an object of child class.

Example:- In this example we have created the two packages
 pack and mypack.

The 'A' class of pack package is public so we can be accessed from outside the package.

But, 'demo' method of this package is protected so it can be accessed from outside the class only through inheritance.

Program:-

package pack;	package mypack;
public class A {	import pack*;
protected void demo(){	class B extends class A{
System.out.println("Hello");	public static void main(String[] args){
}	B obj=new B();
}	obj.demo();
	}

Q. 16] what is encapsulation? Explain in brief?

Ans :

- i) encapsulation means binding of data into single entity
- ii) in every java program class perform the role of encapsulation
- iii) we can achieve encapsulation using private global variable through getter and setter

Example :-

```
class A {
  // variable a,b,c .....
  // method m1, m2, m3.....
```

in this example class A is an entity which binds variable and methods.

Q.17] why global variables are recommended to be private?

Ans: if we make Global variable as private the

- i) no One call that variable directly And

poojagaval1666@gmail.com

www.jbktutorial.com

919158787220

www.thekiranacademy.com

Core Java Interview Questions

- ii) no one can assign invalid value to variable

Q.18] Can you give real time example of encapsulation?

Ans: yes suppose you have an account in the bank if balance variable declared as public variable in the bank software your account balance will be known as public

Ans: if we make Global variable as private the
i) no One call that variable directly And

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

ii) no one can assign invalid value to variable

Q.18] Can you give real time example of encapsulation?

Ans: yes suppose you have an account in the bank if balance variable declared as public variable in the bank software your account balance will be known as public in this case anyone can know account balance. So would you like it? Obviously no. so, they declare balance variable as a private for making your account safe. So that anyone cannot see your account balance.

Here, Dog is the subclass and Animal is the superclass

There are 5 type of Inheritance.

1) Single Inheritance:-

In Single inheritance there is only one base class and one derived class

2) Multiple Inheritance:-

In multiple inheritance there one derived class and multiple base classes so multiple inheritance is not allowed in JAVA.

3) Multi-Level Inheritance:-

In case of Multilevel Inheritance One Derived class derived from one base their base class.

4) Hierarchical Inheritance:-

In case of hybrid inheritance is a combination single and multiple inheritance.

5) Hybrid Inheritance:-

In case of hybrid inheritance is a combination single and multiple inheritance.

Q.19] what are the Object Characteristics?

Ans: The three key characteristics of Object are

- State
- Behavior
- Identity

State:

- Instance variables value is called object state.
- An object state will be changed if instance variables value is changed.

Behavior:

- Behavior of an object is defined by instance methods.
- Behavior of an object depends on the messages passed to it.
- So an object behavior depends on the instance methods.

Identity:

- Identity is the hash code of an object, it is a 32 bit integer number created randomly and assigned to an object by default by JVM.
- Developer can also generate hashCode of an object based on the state of that object by overriding hashCode() method of java.lang.Object class.
- Then if state is changed, automatically hashCode will be changed.

Q.20] Give real time example of Inheritance?

Ans: - 1) Child and their parents are real time example of inheritance. Child acquires the properties by

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

their parents.

Q.21] what are types of Inheritance?

Ans: - 1) Single Inheritance- Child class acquired properties from their parent class

2) Multilevel Inheritance- Child class acquired properties from their parent class and also acquired the properties from their parent class

3) Hierarchical Inheritance- In that case multiple child class who acquired properties from their parent class

4) Hybrid Inheritance- In case of hybrid Inheritance is a combination single and multiple

Q20] Give real time example of inheritance.

Ans: - 1) Child and their parents are real time example of inheritance. Child acquires the properties by

www.jbktutorial.com
www.jbktutorial.com

www.thekiranacademy.com

Core Java Interview Questions

their parents.

Q.21] what are types of Inheritance?

- Ans: -
- 1) Single Inheritance- Child class acquired properties from their parent class
 - 2) Multilevel Inheritance- Child class acquired properties from their parent class and also acquired the properties from their parent class
 - 3) Hierarchical Inheritance- In that case multiple child class who acquired properties from their parent class
 - 4) Hybrid Inheritance- In case of hybrid Inheritance is a combination single and multiple inheritance.

Q.22] Can you explain advantage of inheritance

- Ans: -
- 1) Code Reusability
 - 2) It also help to reduce code duplicacy
 - 3) You can add new features or change the existing features easily in sub-classes
 - 4) Using Inheritance we can achieve method overriding.

Q.23] why multiple inheritance not supported in case of classes?

Ans:- In case of classes, every class has default constructor and every constructor have super Keyword at 1st line. And multiple inheritance means one child class properties acquired From multiple parents class, at that time child class will get confused which super class It should acquire. So, multiple inheritance not supported in case of classes.

Q.24] what is multilevel inheritance?

Ans:- In case of multilevel inheritance there is 1 child class who acquired the properties from Parent class and that parent class acquired the properties from their parent class.

Q.25] what is dynamic dispatch?

- Ans:-
- 1) In the case of dynamic dispatch variable of super class always compiled at compile Time and runtime.
 - 2) In the case of method overridden method of subclass will compiled and method of Superclass will also compile but at runtime method of subclass will get execute.

OR

Dynamic dispatch is the process of assigning subclass object to superclass references Variable

A= new B();

B is the subclass and A is a superclass.

Q.26] Can we assign subclass to superclass and what will happen if we do that? At compile Time runtime.

Ans:- Yes, We can assign subclass to superclass and if we do that.

- 1) In case of variable, variable of superclass will get compiled and execute but
- 2) In case of method, method of both classes will get compiled but only subclass method will get execute.

3)

Q.27] Can private variable or methods inherit?

Ans :- No, Private variable or methods cannot inherit because private members are accessible

www.jbktutorial.com
www.jbktutorial.com

www.thekiranacademy.com

Core Java Interview Questions

Within a same class.

Q.28] Explain "Super" keyword and its syntax?

Ans :- Super is keyword in java which is play role of calling super class members.

Like, Super a; → Variable
 Super (); → Constructor
 Super m (); → Method

In every constructor super () will at first line. If we didn't add super () keyword in constructor. JVM automated added it.

Q.27] Can private variable or methods inherit?

Ans :- No, Private variable or methods cannot inherit because private members are accessible

www.jbktest.com

www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

Within a same class.

Q.28] Explain "Super" keyword and its syntax?

Ans :- Super is keyword in java which play role of calling super class members.

Like, Super a; Variable
 Super (); Constructor
 Super m () Method

In every constructor super () will at first line. If we didn't add super () keyword in constructor. JVM automatically added it.

Q.29] Explain "this" keyword and its syntax?

Ans :- this keyword used to call member to current class.

this.a Variable
 this.m1(); Methods
 this(); Constructor

We have to add this keyword by own because JVM. Not automatically add this Keyword like super ()

Q.30] Do you know rules for writing super (), this () in a program?

Ans :- Yes,

- 1) We use super () to call super class constructor
- 2) And this () is used to call current class constructor
- 3) Super () will put at 1st line
- 4) this () will not be allowed at 2nd line of constructor in java

Q.31] What is constructor in java?

Ans :- 1) Constructor is a special method whose name is same as that of class name.

2) Constructor should not have return type not even void.

3) Constructor will be invoked by JVM whenever we create the object.

There are 2 types of constructor

- 1) Default
- 2) Parameterized constructor

Constructor is used commonly to initialize global variable.

Q.32] Can we call one constructor from other constructor?

Ans :- Yes,

We can call one constructor from other constructor by creating object of that Constructor and using super keyword.

Q.33] What will happen if we make constructor private?

Ans :- If we make constructor private then we cannot create object of that class but it has Static method then we can call members using class name directly.

Q.34] What are the ways to call constructor?

- Ans :-
- 1) By creating object
 - 2) By using this () & super () keywords
 - 3) By using class for name ("com.jbk.A") new instance ();

Q.35] How many constructors we can have in a program if more than one allowed what?

www.jbktest.com

www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

Care we need to take?

Ans :- We can have multiple constructors in a program but they all have different arguments, Arguments sequence or data type of arguments they all must be different.

Q.36] Define Polymorphism

Ans:- An entity which behaves different cases is called as Polymorphism.

E.g. we are using one button to switch the computer ON and OFF this is the polymorphism behavior

There are two types of polymorphism

- 1) Runtime polymorphism
- 2) Compile time polymorphism

poojagavali1666@gmail.com

+919158787220

3) By using class for name ("com.jbk.A") new instance () ;

Q.35] how many constructors we can have in a program if more than one allowed what?

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

Care we need to take?

Ans :- We can have multiple constructors in a program but they all have different arguments,
Arguments sequence or data type of arguments they all must be different.

Q.36] Define Polymorphism

Ans: - An entity which behaves different cases is called as Polymorphism.

E.g. we are using one button to switch the computer ON and OFF this is the polymorphism behavior
There are two types of polymorphism

- 1) Runtime polymorphism
- 2) Compile time polymorphism

Q.37] Give real time example of polymorphism

Ans:-E.g. 1) A man at a same time is a father a son, a husband, an employee.

So the same person possesses different behavior in different situation.

2) We all use a single button to switch ON and OFF the computer.

Q.38] what is method overloading? Explain all rules of method overloading.

Ans: - if class has multiple method having same name but different in parameters.it is
Known as method overloading.

Rules:-
1) method overloading exists in the same class
2) Method name must be the same
3) Parameters must be different.
4) Access specifier and return type can be anything main use of overloading is
Increase readability and maintainability.

Q.39] what is method overriding? Explain all rules of method overriding

Ans: - if subclass (child class) has the same method as declared in the parent class .It is
Known as method overriding.

When we are overriding superclass method in subclass we need to certain rules.

1. The subclass method name must be the same as superclass method name.
2. Parameters of subclass method must be the same as method as superclass
Parameters
3. Subclass method return type must be the same as superclass method return type.
4. Access modifier of subclass must be the same as access modifier of superclass.

Q.40] what is @ override annotation?

Ans:- @ override annotation is used for just showing that methods in current class are overridden.

Q.41] Can we override static method?

Ans :- No, We cannot override static method because static method is for class only.

Q.42] Can we override constructors?

Ans:- No, Constructor overriding is never possible in java because, constructor look like a method
But name should be as class name and no return value.

Q.43] Can we override final methods?

Ns:- No, because, the purpose of the "final" keyword is prevent overriding.

Q.44] what is static keyword in Java?

poojagayali1666@gmail.com
www.jbktutorial.com
www.jbktutorials.com
919158787220

www.thekiranacademy.com

Core Java Interview Questions

Ans:-

- Static keyword in java is single copy storage and it gives updated value for variable.
- We can apply static to variable, methods and blocks.
- Static members will load when class will load.
- We can call static members with their class name directly.

Q.45] Can local variable be static?

Ans:- No,

Local variable cannot be static because static keyword is for class level



But name should be as class name and no return value.

Q.43] Can we override final methods?

Ns:- No, because, the purpose of the "final" keyword is prevent overriding.

Q.44] what is static keyword in Java?

poojagavali1666@gmail.com
www.jbktutorial.com
+919158787220

www.thekiranacademy.com

Core Java Interview Questions

Ans:-

- Static keyword in java is single copy storage and it gives updated value for variable.
- We can apply static to variable, methods and blocks.
- Static members will load when class will load.
- We can call static members with their class name directly.

Q.45] Can local variable be static?

Ans:- No,

Local variable cannot be static because static keyword is for class level.

Q.46] Can Constructor is overloaded?

Ans:- Yes!

Constructor can be overloaded.

In constructor loading, we create multiple constructors with the same name but with Different parameters type or with different number of parameters.

Q.47] what is difference between instance variable and static variable.

Ans:-

Instance Variable	Static Variable
• A variable declared inside the class but outside the body of the method.	• A variable that is declared as static is called a static variable.
• We can call instance variable by object creation.	• We can call static variable by using class name directly.
• Instance Variable not gives updated value.	• Static variable gives updated value for variable.
• Instance variable will load after constructor calling.	• Static variable will load at the same class loaded.
• Instance variable allocate different address for all copies of variable.	• Static variable allocate single space for all copies of variable.

Q. 48] Do you know static block in java? When is it getting executed?

Ans: - Yes

When a block is declared with the static keyword is it called static block in java.

It is normal block of code that is enclosed in braces

({ }) and it is preceded by a keyword "static".

- Static block in java is executed every time when a class loads.

Q. 49] Can constructor be static?

Ans: - Constructor cannot be static because constructor allocate different space in memory whereas static have single copy storage and static is for class level.

Q. 50] Can we call static method and variable with object?

Why it is not preferable?

Ans: - Yes,

We can call static method and variables with object but when we create object of that class then we create different space for static and non- static members.

Which is unnecessary, since calling static members with their class name is most preferable?

www.jbktutorial.com

www.jbktutorial.com

www.thekiranacademy.com

Core Java Interview Questions

Q. 51] what is final keyword in java?

Ans: - 1) final means constant in short way.

- 2) We can apply final to variables, methods, blocks and class.
- 3) If variable is final then we cannot change the value of variable.
- 4) If method is final then it cannot overridden
- 5) If class is final then it cannot extends.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

Q. 51] what is final keyword in java?

- Ans: - 1) final means constant in short way.
2) We can apply final to variables, methods, blocks and class.
3) If variable is final then we cannot change the value of variable.
4) If method is final then it cannot overridden
5) If class is final then it cannot extends.

Q. 52] what will happen if class is final?

- Ans: - If class is final then we cannot extends it.

Q. 53] what will happen if method is final?

- Ans: - If method is final then it cannot override.

Q. 54] what will happen if variable is final?

- Ans: - If variable is final then we cannot change the value of variable.

Q. 55] can local variable will final?

- Ans: - Yes,
Local variables are final but can't change the value of local variable.

Q.56] what is abstraction in JAVA?

- Ans:-
I. Exposing only required or important things is called abstraction.
II. Abstraction can be done in 2 ways a) Abstract class b) Interface
III. It is used for maintaining the standard of coding in project.

Q.57] How to achieve abstraction? Explain in details.

- Ans:- We achieve abstraction by using abstract class and interface.
• In abstract class have abstract method and non-abstract method.
• Interface will not have method body.
• Variable are public final static.

Q.58] Can you explain interfaces at least 4 points about it?

- Ans:-
i. No constructor present in interface.
ii. Multiple inheritance allowed in interface.
iii. Method is abstract only we implement interface in class.
iv. In implementing class all method must be public.
v. Variable are public static final it acts like a constant.
vi. We cannot create object of interface.
vii. All methods of interface are abstract and abstract methods have no body.

Q.59] Can you explain abstract class at least 4 points about it?

- Ans:-
i. Abstract class has a constructor.
ii. We cannot create object of abstract class.
iii. If there is single method in class is abstract then that class must be an abstract.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

- iv. It has abstract method. To use this class we extend it.
v. After extending abstract class, access specified of overridden method must be bigger than or same as that of access specifier mentioned in method of abstract class.

Q.60] Can you list difference between interface and abstract class in java? At least 4 points.

- Ans:- Interface:-
i. We can achieve multiple inheritance through interface.

- i. Abstract class has a constructor.
- ii. We cannot create object of abstract class.
- iii. If there is single method in class is abstract then that class must be an abstract.

www.jbktutorial.com
www.jbktutorials.com

poojagavali1666@gmail.com

+919158787220

www.thekiranacademy.com

Core Java Interview Questions

- iv. It has abstract method. To use this class we extend it.
- v. After extending abstract class, access specified of overridden method must be bigger than or same as that of access specifier mentioned in method of abstract class.

Q.60] Can you list difference between interface and abstract class in java? At least 4 points.

Ans:- Interface:-

- i. We can achieve multiple inheritance through interface.
- ii. Interface does not have constructor.
- iii. Interface has only abstract method.
- iv. Access modifier of method should be public.

Abstract Class:-

- I. We cannot achieve multiple inheritance through abstract class
- II. Abstract class have constructor
- III. Abstract class have abstract method and non-abstract also
- IV. Access specifier / modifier of method should be anything.

Q.61] what is abstraction in JAVA?

Ans:-

- IV. Exposing only required or important things is called abstraction.
- V. Abstraction can be done in 2 ways a) Abstract class b) Interface
- VI. It is used for maintaining the standard of coding in project.

Q.62] How to achieve abstraction? Explain in details.

Ans:- We achieve abstraction by using abstract class and interface.

- In abstract class have abstract method and non-abstract method.
- Interface will not have method body.
- Variable are public final static.

Q.63] Can you explain interface at least 4 points about it?

Ans:-

- viii. No constructor present in interface.
- ix. Multiple inheritance allowed in interface.
- x. Method is abstract only we implement Interface in class.
- xi. In implementing class all method must be public.
- xii. Variable are public static final it acts like a constant.
- xiii. We cannot create object of interface.
- xiv. All methods of interface are abstract and abstract methods have no body.

Q.64] Can you explain abstract class at least 4 points about it?

Ans:-

- vi. Abstract class has a constructor.
- vii. We cannot create object of abstract class.
- viii. If there is single method in class is abstract then that class must be an abstract.
- ix. It has abstract method. To use this class we extend it.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

- x. After extending abstract class, access specified of overridden method must be bigger than or same as that of access specifier mentioned in method of abstract class.

Q.65] Can you list difference between interface and abstract class in java? At least 4 points.

www.thekiranacademy.com

Core Java Interview Questions

- x. After extending abstract class, access specified of overridden method must be bigger than or same as that of access specifier mentioned in method of abstract class.

Q.65] Can you list difference between interface and abstract class in java? At least 4 points.

Ans:- Interface-:

- v. We can achieve multiple inheritance through interface.
- vi. Interface does not have constructor.
- vii. Interface has only abstract method.
- viii. Access modifier of method should be public.

Abstract Class-:

- V. We cannot achieve multiple inheritance through abstract class
- VI. Abstract class have constructor
- VII. Abstract class have abstract method and non-abstract also
- VIII. Access specifier / modifier of method should be anything.

Q.66] what is garbage collection concept in java? Explain?

Ans:-

- i. Garbage collection is process of reclaiming the runtime unused memory automatically.
- In other words, it is a way to destroy the unused objects.
- ii. It makes java memory efficient because garbage collector removes the unreferenced objects from heap memory.
- iii. It is automatically done by the garbage collector (a part of JVM) so we don't need to make extra efforts.

Example:-

```
public class Testgarbage {
    public void finalize() {
        System.out.println("Object is garbage collected");
    }
    public static void main (String args []) {
        Testgarbage obj = new Testgarbage ();
        obj = null;
        System.gc();
    }
}
```

o/p- object is garbage collected

Q.67] How to advice or suggest collection to happen ?

Ans:-

Garbage Collection happen with system.gc() method
gc() is a static method of system class
+919158787220

Q.68] Explain system gc ()?

Ans:-

- i. System gc () is method of garbage collection

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

- ii. It is used to invoke garbage collection to perform cleanup processing.
- iii. Recycling unused objects in order to make the memory they currently occupy available for quick reuse

```
→ gc()
{
    Runtime.getRuntime().gc();
}
```

Q.69] Drag from top and touch the back button to exit full screen.

Ans:-

- i. The finalize() method is called just before the clean-up the object which is eligible for garbage collection to perform clean-up activity.
- ii. The garbage collector calls the finalize() method only once on any object.

Ans:-

- i. System.gc() is method of garbage collection

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com**Core Java Interview Questions**

- ii. It is used to invoke garbage collection to perform cleanup processing.
- iii. Recycling unused objects in order to make the memory they currently occupy available for quick reuse

```
→ gc()
{
    Runtime.getRuntime().gc();
}
```

Q.69] What is use of finalize() method?

Ans:-

- i. Finalize() method is a method of object class that the garbage collector always calls just before the clean-up the object which is eligible for garbage collection to perform clean-up activity.
- ii. The garbage collector calls the finalize() method only once on any object.

Q.70] What is difference between final, finally and finalize?

Ans:-

- 1) Final :-
 a) Final is the keyword
 b) We can apply final keyword to variable methods and classes.
 c) The functionality of final keyword is
 - If variable is final then we can not change the value of variable.
 - If method is final then it cannot be overridden by subclasses.
 - If class is final then it cannot be extended.
 d) Final method is executed only when we call it.
- 2) Finally :-
 a) Finally is the block in java exception handling to execute the important code whether the exception occurs or not
 b) Finally blocks always related to the try and catch block in exception handling
 c) Functionality of finally is, it runs the important code even if exception occurs or not.
 d) Finally block is executed as soon as the try catch block is executed
- 3) Finalize :-
 a) Finalize is the method in java which is used to perform clean up processing just before object is garbage collected.
 b) Finalize method is executed just before the object is destroyed.

Q.71] How to read file in java? Can you write a program?

Ans:-

With the help of inputstream we can read any file in Java.

```
Program:- Public class Example {
    Public static void main (String[] args) {
        File path = new file("C:/test/obc.txt");
        Int p=0;
```

www.jbktutorial.com
www.jbktutorials.com

1. Contact us through our website or visit to the institute

2. Fill out the registration form & career counseling

3. Take admission & collect

6. Attend online/classroom sessions

7. Take as many mock tests as you need

8. Prepare for the interview alongside

3

www.thekiranacademy.com

Core Java Interview Questions

```
While { ( p= path read() ) != -1) {  
    Char c= (char) p;  
    System.out.print( /n (c);  
}  
}
```

Q.72] What is the use of use file class in java ?

Ans:-

- 1) file is inbuilt class in java.
 - 2) This is used for File Handling.
 - 3) It is present in java.io package.
Used for getting path or renaming or deleting file.
 - 4) delete(), equals(), exists(), CreateNewFile()
- Are the some methods of file class.

Q.73] Explain Serialization?

Ans:-

- 1) Writing object state into any other source is called as serialization.
- 2) serialization is needed when there is a problem to send data from one class to another class where the other class is on a different location.
- 3) String class and wrapper classes implement serializable interface by default.
- 4) If the superclass implements serializable interface then all its subclasses will be serializable automatically.
- 5) If we don't want to serialize some fields of class then use transient with that fields.

Q.74] Explain De-Serialization?

Ans:-

This is the reverse process of Serialization.
i.e. converting a data structure or object into a series of bytes of storage.
When deserializing a byte stream back to an object it does not use the constructor.
It creates an empty object and uses reflection to write the data to the fields.
Just like with serialization, private and final fields are also included.

Q.75] What is difference between array and collection ?

Ans:-

- Array- In array once we give size then we can not adjust the size by our requirement.
- Performance point of view array is faster than collection.
- Memory point of view array not recommended to collection.
- Array holds primitive as well as object.
- In array for any requirement no any method available.
- Array can hold only homogeneous value.

- Collection :-

 1. In collection if we declared size then we can adjust size as our requirement.
 2. Performance point of view collection is slower than array.
 3. Memory point of view collection is recommended to use.
 4. Collection holds only objects.
 5. For any requirements there is readymade methods.

www.jbktutorial.comwww.jbktutorials.comwww.thekiranacademy.com

Core Java Interview Questions

6. Collection can hold homogeneous & heterogeneous value.

Q.76] What is difference between arraylist, vector and linkedlist ?

Ans:-

- ArrayList, Vector and LinkedList are types of List interface.
- a) ArrayList
 - i. It maintains insertion order.
 - ii. Iterator and ListIterator are used.
 - iii. It is not synchronized.
 - iv. It is synchronized.

4. Collection holds only objects.
 5. For any requirements there is readymade methods.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

6. Collection can hold homogeneous & heterogeneous value.

Q.76] What is difference between arraylist, vector and linkedlist ?

Ans:-

ArrayList, Vector and LinkedList are types of List interface.

a) ArrayList

- i. It maintains insertion order.
- ii. Iterator and List Iterator are used.
- iii. It is not synchronized.
- iv. Storage representation is in index.
- v. ArrayList added from java2.
- vi. ArrayList is faster, if you want to fetch element as index because it uses an array to store values.

b) Vector

- i. It is a legacy class. But revised from java2.
- ii. Slow or synchronized.
- iii. In vector

Enumeration, iterator, List Iterator are used.

c) LinkedList

- i. LinkedList is a node structure. It is good to use when you want to add or delete elements in between.
- ii. Linked added from java2.
- iii. LinkedList is not synchronized.
- iv. Access -
Iterator, List Iterator

Q 77] What is difference between arrayList and hashset?

ArrayList	hashset
1. It is a class of List interface.	1. It is the class of Set interface.
2. Insertion order is maintained.	2. Order is not maintained.
3. Duplicate elements are allowed.	3. Duplicate elements are not allowed.
4. Searching is possible using get() method.	4. Searching is not possible.
5. Index is internally maintained.	5. Index is not maintained internally.

Q 78] What is difference between List, set and map?

- A) List-
 1) Duplicate elements are allowed.
 2) Insertion order is maintained.
 3) Store data in the form of single element.
 4) Allow multiple null values.
 5) ArrayList, Vector and Set LinkedList are the classes of List.
 6) Using add method we can add elements in List.
 7) Using get() method we can search by index.

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com

Core Java Interview Questions

- b) Set-
 1) Duplicate elements are not allowed.
 2) Insertion order is not maintained.
 3) Store data in the form of single elements.
 4) Allow single null values.
 5) HashSet, TreeSet and LinkedHashMap are subclasses of Set.
 6) Using add method we can add elements.
 7) Searching is not possible in Set.

nojagadevali166@gmail.com

1919158787220

- b) Set:- 1) Duplicate elements are not allowed.
2) Insertion order is not maintained.
3) Store data in the form of single elements.
4) Allow single null values.
5) HashSet, TreeSet and LinkedHashSet are subclasses of set.
6) Using add method we can add elements.
7) Searching is not possible in set.
- c) Map:- 1) Duplicate elements are not allowed.
2) Insertion order is not maintained.
3) Store data in the form of key and values.
4) HashMap, TreeMap and Hashtable map are the subclasses of map.
5) Using get(key) we can access value.
6) Using keySet() we can get keys.

Q. 79] Can you iterate ArrayList by iterator? Explain with program ?

Ans:-

Yes, we can iterate ArrayList by iterator and ListIterator.

```
Program :- import java.io.*;  
          Import java.util.*;  
          Class iteratordemo  
{  
    Public static void main(string [] args)  
    {  
        ArrayList <integer>list= new ArrayList <integer>();  
  
            list.add (1)  
            list.add (2)  
            list.add (3)  
        // Iterator  
        Iterator itr = list.iterator();  
        System.out.print/n {"Iterator"}  
        System.out.print/n {"forward traversal:"};  
        While. { itr. Hasnext()  
            System .out .print {itr. Next() . + " " };  
            System .out .print ln();  
        } }
```

Q.80] Can you iterate ArrayList by List Iterator. Explain with program .

Ans:-

Yes, we can iterate ArrayList by List Iterator

```
Program:- import java.io *;  
          Import java.util.*;  
          Class iterator_demo_f  
          Public static void main {string () args} {  
              ArrayList <Interger>obj = new arraylist <Interger>();  
              obj . add (1);  
              obj . add (2);  
              obj . add (3);  
              ListIterator i = obj.list Iterator () ;           //Iterator
```

```

import java.util.*;
Class iterator demo {
Public static void main { string () args } {
ArrayList <Intger>obj = new ArrayList <Intger>();
obj . add (1);
obj . add (2);
obj . add (3);
ListIterator i = obj.list Iterator () ; //Iterator

```

www.jbktutorial.com
www.jbktutorial.com

www.thekiranacademy.com Core Java Interview Questions

```

System.out.print/n ("List Iterator");
System.out.print/n ("forward Traversal : ")
While { i.hasNext ()}
System.out.print/n (i.next () + " ");
System.out.print/n ();
System.out.print/n ("Backword Traversal : ");
While { i.hasPrevious ()}

System.out.print (i.previous () + " ");
System.out.print/n ();

```

Q.81] Can you iterate ArrayList with the help of for each loop ? Explain in with program.

Ans:-

Yes, we can iterate ArrayList with the help of for each loop.

Program:- import java.util.ArrayList;

Public class ArrayList demo{

```

Public static void main (string () args){
    ArrayList <String>obj = new ArrayList <String>();
    obj.add("pune")
    obj.add ("Mumbai")
    obj.add ("Goa")

```

System.out.print/n ("Actual ArrayList: " + obj);

//Iterating using For each

```

For ( string sr : obj ) {
    System.out.print/n ("/n" + sr);
} } }

```

Q.82] Can you iterate hashmap ? Explain in with program.

Ans:-

We can iterate hashmap using Iterator, ListIterator or by for each

Program :- Public static void main {string () args } {

HashMap <String ,String > obj = new HashMap <String ,String >

```

    obj.put("Actor","Bhushan");
    obj.put("Leader","Bipin");
    obj.put("Moniter","Hruanl");

```

System.out.print/n (obj);

poonamgoyal1666@gmail.com

For (string str : obj.keySet +0) {
 System.out.print/n (" "+str+ " "+obj.get(str));
}

Q.83] What you know about legacy classes in collection hierarchy?

Ans:-

- Legacy classes are the classes which are present from the earliest version (JDK 1.0) of java.
- These classes are slow and synchronized .
- Example of legacy classes are 1)vector 2) Hashtable
- Vector is the class of list and
- Hashtable is the class of map interface

www.jbktutorial.com
www.jbktutorial.com

www.thekiranacademy.com Core Java Interview Questions

Q.84] What comes under the list, set and map ? Explain each of them.

Ans:-

List and set inherit collection but map does not, It is just a part of framework from java.util. packages.

List → {Duplicate value , insertion order, index ,search, get () } - Available

1. ArrayList – All feature of list
2. Vector – Legacy class + synchronized + all feature of list
3. LinkedList – All feature of list

- Legacy classes are the classes which are present from the earliest version (JDK 1.0) of java.
- These classes are slow and synchronized.
- Example of legacy classes are 1)vector 2) Hashtable
- Vector is the class of list and
- Hashtable is the class of map interface

www.jibktutorial.com
www.jibktutorial.com

Q.84] What comes under the list, set and map ? Explain each of them.

Ans:-

List and set inherit collection but map does not, It is just a part of framework from java.util packages.

List → {Duplicate value , insertion order, index ,search,get () } - Available

- ArrayList - All feature of list
- Vector - Legacy class + synchronized + all feature of list
- LinkedList - All feature of list

Set → {Duplicate value , insertion order, index ,search,get () } - Not Available

- HashSet - All feature of Set
- Treeset - Sorting + all features of set
- LinkedHashSet - Insertion order allowed + all features of set

Map → {Duplicate value , insertion order, index} - Not available

- {get key(), keyset() for search key & values in allow in map}
- HashMap - all feature of map
 - Treemap - sorting + all feature of map
 - LinkedHashMap - Insertion order + all feature of map
 - Hashtable - Legacy class + synchronized + all features of map

Q.85] What is difference between for each and loop ? Explain with in program for loop.

Ans:-

For loop	For each loop
In for loop, control variable condition and iteration are usually put together within a single statement.	Foreach is the enhanced for loop which was introduced in java. It is used to iterate through a collection of objects .
Program:- Public class Ex { Public static void main {String []class} { ArrayList<integer>obj=new arralist(); Obj.add(5); Obj.add(9); Obj.add(7); Obj.add(65); Obj.add(4); Obj.add(0); For (int I =0,<obj.size();it+) { Syso{"list items :" +obj.get(i)}; } }	Public class Ex{ Public static void main{String[]args} { ArrayList <Inter> obj= newArraylist(); Obj.add(5); Obj.add(9); Obj.add(7); Obj.add(65); Obj.add(4); Obj.add(0); For (Interger value : obj) { Syso("Items":+ value); } }

List items : 5

O/P List items : 5

www.jibktutorial.com
www.jibktutorial.com

List items : 9	List items : 9
List items : 7	List items : 7
List items : 65	List items : 65

Drag from top and touch the back button to exit full screen.

List items : 5	O/P List items : 5
----------------	--------------------

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com		Core Java Interview Questions
List items : 9		List items : 9
List items : 7		List items : 7
List items : 65		List items : 65
List items : 4		List items : 4
List items : 0		List items : 0

Q.86] What is difference between Iterator and list iterator.

Ans:- A) Iterator :-

- i. Using Iterator we can access the element of collection only in forward direction using the hasnext () and next () method.
- ii. You cannot add element to collection.
- iii. You cannot replace the existing element with new element.
- iv. Using Iterator you cannot access the index of element of collection

B) List-iterator :-

- i. Using list-Iterator we can access the element of collection in forward direction using hasnext() next() methods and in reverse direction using has previous () And previous () methods.
- ii. You can add the element to collection.
- iii. You can replace the existing element with new element by using void set.
- iv. Using list - iterator you can access the index of element of collection using next Index() and previous Index() methods.

Q.87] What is difference between Hashmap,Treemap,Linkedhashmap,Hashtable.

Sr	Ans:- Class	Hashmap	Treemap	Linkedhashmap	Hashtable
1	Insertion order	Not allow	Sorting	Allow	Not allow
2	Synchronization	No	No	No	Yes
3	Duplicate Variable	No	No	No	No
4	Null Value	Allowed	Only Value	Allowed	Allowed
5	Interface	Map	Navigable map,Sorted map,Map	Map	Map

Q.88] What are generics in collection ?

Ans:-

- The generics collection disable the type-casting and there is no use of type-casting When it is use in generics.
- It makes the code stable by detecting the bugs at compile time

Q.89] What is checked exception and unchecked exception. What is runtime exception and Compile exception ?

Ans:- * Compile time exception or checked exception.

The compile time exception as these exceptions are checked by the Compiler during the compilation process to confirm whether the exception is Handled by the programmer or not. If not, then the system displays a compilation

www.jbktutorial.com
www.jbktutorials.com

www.thekiranacademy.com	Core Java Interview Questions
--	-------------------------------

Error.

- Eg. 1) Class Not Found Exception
- 2) Idexception

*Runtime Exception or Unchecked Exception

The exception that occurs during the execution of the program is known as runtime exception.

- ii. These exceptions are generally ignored during the compilation process. They are

Not checked while compiling the program.

- Eg. Logical error , arithmetic exception