**) What are the main features of Java?**

Below is the list of features of java.

a) Object Oriented  
b) Simple  
c) Platform Independent  
d) Secured  
e) Robust  
f) Portable  
g) Multithreaded  
h) Distributed

Click [here](http://www.javatpoint.com/features-of-java) to see these features in detail.

**2) What are the fundamental principles of object-oriented programming?**

a) [Inheritance](https://javaconceptoftheday.com/inheritance-in-java/)

b) [Abstraction](https://javaconceptoftheday.com/abstraction-in-java/)

c) [Polymorphism](https://javaconceptoftheday.com/polymorphism-in-java/)

d) [Encapsulation](http://www.tutorialspoint.com/java/java_encapsulation.htm)

**3) What do you mean by inheritance in java?**

Inheritance is one of the key principles of object-oriented programming. Through inheritance, one class can inherit the properties of another class. The class from which properties are inherited is called super class and the class to which properties are inherited is called sub class.

Click [here](https://javaconceptoftheday.com/inheritance-in-java/) to see more info on Inheritance in java.

**4) What is constructor overloading? What is the use of constructor overloading?**

A class can have any number of constructors. These constructors will have different list of arguments. It is called constructor overloading. Constructor overloading provides different ways to instantiate a class.

Click [here](https://javaconceptoftheday.com/constructors-in-java/) to see more on constructors in java.

**5) What is polymorphism in java?**

Polymorphism refers to any entity whether it is a method or a constructor or an operator which takes many forms or can be used for multiple tasks.

Click [here](https://javaconceptoftheday.com/polymorphism-in-java/) to see more info on polymorphism in java.

**6) What is the method overloading in java?**

If a class has more than one method with same name but with different list of arguments, then it is called method overloading.

Click [here](https://javaconceptoftheday.com/method-overloading-in-java/) to see more on method overloading in java.

**7) What is the method overriding?**

If a super class method is modified in the sub class then it is called method overriding.

Click [here](https://javaconceptoftheday.com/method-overriding-java/) to see more info on method overriding in java.

**8) Does java supports multiple inheritance?**

Java supports multiple inheritance but only through interfaces. That means a class can implement more than one interfaces but cannot

extend more than one class.

**9) What is the difference between constructor and method?**

Constructor is a special member of a class which is used to create the objects to the class. It is special because it will have same name as class. It will have no return type.

Method is ordinary member of a class which is used to implement some behavior of a class. It will have its own name and return type.

**10) Can we overload the main() method?**

Yes, we can overload a main() method. A class can have any number of main() methods. But, one of those must be in the form **“public static void main(String[] args)”** in order to start the execution.

**11) How are the exceptions handled in java? OR explain try, catch and finally blocks in java?**

Java has its own mechanism to handle the exceptions. In Java, exceptions are handled using three blocks – try, catch and finally blocks.

**try block** – The code to be monitored for exceptions will be kept in this block.

**catch block** – If any exceptions occurred in try block, those exceptions will be caught by this block.

**finally block** – This block will be always executed whether exception is raised or not and raised exceptions are caught or not.

See the complete Exception Handling tutorial [here](https://javaconceptoftheday.com/category/exception-handling/).

**12) What are PATH and CLASSPATH?**

PATH and CLASSPATH are two environment variables which need to be set in order to compile and run the java programs.

**13) What is multithreaded programming?**

Multithreaded programming is one of the key features of java which allows multiple threads to execute their task simultaneously.

**14) What is the difference between error and exception in java?**

Click [here](https://javaconceptoftheday.com/difference-between-error-vs-exception-in-java/) to see the differences between error and exception in java.

**15) What are the differences between static and non-static methods?**

Static method is common to all instances of a class. Static methods are stored in the class memory. Where as non-static methods are stored in the object memory. Each instance of a class will have their own copy of non-static methods.

**16) What are the differences between method overloading and method overriding?**

Click [here](https://javaconceptoftheday.com/difference-between-method-overloading-and-method-overriding-in-java/) to see the differences between method overloading and overriding.

**17) What are the different ways of creating threads in java?**

There are two ways to create the threads in java

a) By extending java.lang.Thread class.

b) By implementing java.lang.Runnable interface.

[See more.](https://javaconceptoftheday.com/creating-threads-in-java/)

**18) What is synchronization in java?**

Synchronization is a way of controlling the access of a method or a block by multiple threads. Only one thread can enter into a method or a block which has been declared as synchronized. Synchronization is one of the way to achieve thread safety.

[See more..](https://javaconceptoftheday.com/synchronization-in-java/)

**19) What is the use of final keyword in java?**

final keyword in java is used to restrict the modification of a class or a method or a variable. A final class can not be extended, a final method can not be overridden, and we can not change the value of a final variable.

[See more…](https://javaconceptoftheday.com/final-keyword-in-java/)

**20) What is static binding and dynamic binding in java?**

Click [here](https://javaconceptoftheday.com/static-binding-and-dynamic-binding-in-java/) to see what is static binding and dynamic binding in java.

**21) What is garbage collection in java?**

Removing unwanted objects or abandoned objects from the memory is called garbage collection. Garbage collection is done automatically in java. You need not to remove the unwanted objects explicitly. Garbage collector thread does this for you. click [here](https://javaconceptoftheday.com/garbage-collection-finalize-method-java/) to see how garbage collector thread works in java.

**22) What are the differences between ArrayList and Vector class in java?**

Click [here](https://javaconceptoftheday.com/difference-between-arraylist-and-vector-class/) to see ArrayList Vs Vector in java.

**23) What is cloning in java?**

Cloning is a process of creating an exact copy of an existing object in the memory. Cloning may be shallow or deep. In java, clone() method is used to create a clone of an object.

[See more…](https://javaconceptoftheday.com/difference-between-shallow-copy-vs-deep-copy-in-java/)

**24) What are differences between final, finally and finalize in java?**

Click [here](https://javaconceptoftheday.com/difference-between-final-finally-and-finalize-in-java/) to see the differences between final, finally and finalize in java.

**25) What are checked and unchecked exceptions in java?**

Click [here](https://javaconceptoftheday.com/checked-unchecked-exceptions-java/) to see about checked and unchecked exceptions in java.