

1.What is the most important feature of java?

Ans:platform independant is the most important feature of java.

Because we can use and run java class file anywhere,where jdk is installed.

2.What do you mean by platform independant?

Ans:Platform independence is the ability of a software program to run on different operating systems and hardware without requiring significant modifications to its code.

This is often achieved through a intermediate virtual machine, like Java's JVM, which translates the code for each specific platform, allowing for a "write once, run anywhere" capability across various systems like Windows, Linux, and macOS.

3.What is JVM?

Ans:JVM is a virtual machine that runs Java bytecode.

It provides a platform-independent environment for executing Java programs by converting bytecode into machine code at runtime, and it handles tasks like memory management, garbage collection, and security.

4.Are jvm's platform independant?

Ans:No.jvm itself is not platform independant.

But it is a main reason for java to be platform independant.

5.What is difference between JDK and JVM?

Ans:JVM is part of jdk.It is responsible for run and execute the .class file.

And this is the main reason for java platform independent.

Where jdk is a complete software development kit to develop java applications.

It includes jvm,jre to perform task.

6.What is pointer and does java support pointers?

Ans:A pointer is a variable that stores the memory address of another variable.

java does not support pointers directly.

7.What is JIT compiler?

Ans:Jit stands for just in compiler.Jit is part of jvm that improves the performance of java programs at runtime.

8.Why we need object in java?

Ans: Java is a object oriented programming language.And object are the main part of oop(object oriented programming ).Everything in java is based on objects and classes.

9.What is an object?

Ans:An object is a real-world entity.Each object is unique it has different meaning.

It represents real world things in our program.It stores data and performs actions that we are trying to do.

10.What is an Instance?

Ans:An instance is simply an object created from a class.

When you create an object using the new keyword, you are instantiating the class which means creating an instance of it.

11.Difference between class,interface and enum?

Ans:A class is a blueprint for creating objects. It defines variables and methods .In class we create methods and objects and we can access them.

An interface is a contract that defines methods without implementation . Classes implement interfaces to define those methods.Define what a class must do, not how.

An enum is a special Java type used to define constant values.Cannot extend other classes.

12.Why enum?

Ans:An enum is used in Java to define a set of fixed, constant values.Use enum when a variable should only take limited predefined values.

Unlike constants defined with int or String, enums are type-checked at compile time.Enums make your code easier to understand because the values are meaningful.Enums make your code easier to understand because the values are meaningful.

13.Is main method mandatory for compilation or execution?

Ans:For compilation main method is not mandatory.But for execution main method is mandatory.You cannot run a Java class without a main() method.

so for execution main method is mandatory.

14. what is mean by user define method and predefine method?

Ans: In Java, methods (also called functions) are used to perform specific tasks. They are grouped into:

I) User-Defined Method

II) Predefined Method

A) User-Defined Method:

A user-defined method is a method that you create to perform a specific task.

ex. void show()

B) Predefined Method:

A predefined method is already defined in Java's standard library. You simply call it no need to define it.

ex. length(), String

15. what is mean by user define class and predefine class?

Ans: 1. User-Defined Class

A user-defined class is a class that you create based on your application's needs.

ex. Student, Employee, Car

2. Predefined Class

A predefined class is a class that is already defined in Java's standard library (JDK).

ex. String, Scanner, Math, ArrayList

16. Does JVM execute user-defined method automatically?

Ans: No, the JVM does not execute user-defined methods automatically. When you run a Java program, the JVM looks for this exact method.

User-defined methods must be called manually from inside the main() method or from other methods.

17. Definition of main method?

Ans: The main() method is the starting point of execution for a Java program. It must be written exactly as:

```
public static void main(String[] args)
```

Without it, the program won't run .

It is the method that the JVM automatically calls to start program execution.

18.How many user defined methods can we define in class?

Ans:we can define as many methods as needed.

19.What is an order of execution of all user define methods?

Ans:The order of execution of user-defined methods in Java is based on the order in which they are called in the main() method .

20.What is difference between System.out.println() and System.out.print()?

Ans:print() is used for print on same line where, println() is used for print and go to next line.