

1.what is programming language?

Ans: A programming language is a way for programmers to communicate with computers. Programming languages consist of a set of rules that allows values to be converted into various ways of generating machine code.

2. why do we need a programming language?

Ans: Programming languages are necessary in computer programming because they provide a way for humans to communicate instructions to a computer in a language that the computer can understand. Programming languages are also designed to be easy for humans to read and write, which makes the process of creating and modifying software more efficient.

3. Features of Java.

- Simple: Java is a simple programming language and easy to understand because it does not contain complexities that exist in prior programming languages.
- Object- oriented: Java is an Object Oriented Programming Language, which means in Java everything is written in terms of classes and objects.
- Platform independent: The design objective of java people is to develop a language that must work on any platform. Here platform means a type of operating system and hardware technology. Java allows programmers to write their program on any machine with any configuration and to execute it on any other machine having different configurations.
- Portable: The WORA (Write Once Run Anywhere) concept and platform-independent feature make Java portable.
- Robust: The Java Programming language is robust, which means it is capable of handling unexpected termination of a program.
- Secure: Java also provides security features to the programmers. Security problems like virus threats, tampering, eavesdropping, and impersonation can be handled or minimized using Java.
- Multi-threading: in java it enables to create a program that executes multiple tasks concurrently.

4. what is an object?

Ans: An object is an entity with the state and behaviour. Such as Pen, car etc

In real world everything is object.

5. what is a class?

Ans: A class is a collection of items with similar characteristics.

6. Explain about the java main () method?

Ans: `Public static void main(String[] args){}`

Public: The access modifier of the `main` method needs to be `public` so that the JRE can access and execute this method. If a method isn't `public`, then access is restricted.

Static: When the Java program starts, there is no object of the class present.

The `main` method has to be `static` so that the JVM can load the class into memory and call the `main` method without creating an instance of the class first.

Void: Every Java method must provide the return type. The Java `main` method return type is `void` because it doesn't return anything.

Main (): The Java `main` method is always named `main`. When a Java program starts, it always looks for the `main` method.

String[] args: Java `main` method accepts a single argument of type string array. Each string in the array is a command line argument.