Assignment

**1] What is programming language?**

**Ans**-🡪to communicate with a person, we need a specific language, similarly to communicate with computers, programmers also need a language is called Programming language.

-A programming language is a computer language that is used by programmers (developers) to communicate with computers. It is a set of instructions written in any specific language ( C, C++, Java, Python) to perform a specific task.

-A programming language is mainly used to develop desktop applications, websites, and mobile applications.

**2]why do we need a programming language?**

**Ans** ->Computers do not understand human language, so people use programming languages to translate directions into binary code that devices can follow as apps, websites, and software programs.

-Coding plays a crucial role in our increasingly digital world. Many aspects of modern life rely on coding.

**3] what are the features of Java ?**

Ans 🡪Following are the features of java :

1] Simple

2]object oriented

3]portable

4]platform independent

5]Secure

6]Robust

7]Interpreted

**4]what is an Object ?**

**Ans🡪** an object is a member of Java class .  It is also known as **instance** of the class .

-objects are created at run time. In simple words, object is a real word entity.

-For example, dog, car, pen .

-There are various ways to create object in java

* Using new keyword
* Using newInsatnce () Method
* Using clone() Method
* Using Deserialization
* Using Factory method

**5] What is a class?**

Ans🡪A class is a group of objects which have common properties. It is a template or blueprint from which objects are created. It is a logical entity. It can't be physical.

-A class in Java can contain

* Fields
* Methods
* Constructors
* Block
* Nested class and interface
* Syntax to Declare class
* class <class name> {
* field;
* method;

**6] Explain about the main () method in java?**

Ans🡪The main () is the starting point for JVM to start execution of a Java program. Without the main() method, JVM will not execute the program.

public: It is an access specifier. We should use a public keyword before the main() method so that JVM can identify the execution point of the program. If we use private, protected, and default before the main() method, it will not be visible to JVM.

**static:** You can make a method static by using the keyword static. We should call the main() method without creating an object. Static methods are the method which invokes without creating the objects, so we do not need any object to call the main() method.

**void:** In Java, every method has the return type. Void keyword acknowledges the compiler that main() method does not return any value.

**main():** It is a default signature which is predefined in the JVM. It is called by JVM to execute a program line by line and end the execution after completion of this method. We can also overload the main() method.

**String args []:** The main() method also accepts some data from the user. It accepts a group of strings, which is called a string array. It is used to hold the command line arguments in the form of string values.