Day-6 Fundamentals of Java (Assignment Question)

Que.1 what is programming language?

Making a set of instruction that instruct a computer how to carry out a task is the process of programming. There are numerous computer programming languages available for use in programming.

Category of programming languages:

- Machine Level Language.
- Assembly language.
- High level language.

Que.2 why do we need a programming language?

Programming language is important in our daily life to enhance and increase the power of computer, mobile solution and the internet

Que.3 what are the feauter of java?

- Object Oriented - The feauter of object oriented programming are supported by java its object model is straight forward and flexible

- plateform independent - Java is plateform independent language plateform idependent application program created in one operating system can run on any other operating system.

Simple - Because Java incorporates many c/c++ capabilities, it is simple to understand.

Secure - Java offers a variety of defences against malware and viruses. It guarantees that neither damage nor security will be compromised.

portable - we have the idea of portability in java. Java allows the same software to run on various plateform

Robust - It assist us in identifying potential errors as soon as feasible during program development

Multithreaded - Java's multithreading programming capability enables you to creat a program that executes multiple task Concurrently.

Distributed - Java maintain the TCP/IP protocol and is therefore suitable for distributed internet environment.

Qu. 4 what is an object?

An object is an entity with state and behaviour An object has three characteristics:

State: represents an object data (values).

Behaviour - represent how an object behaves (and how it functions)

Identity - usually an distinct id is used to implement

an object identification. the external user can't not see the value of the ID. However the jvm uses it internally to uniquely identify each object.

Different ways of Object defination

- An object is a real world entity.
- An object is a runtime entity
- An object is an entity which has state and behaviour
- The Object is an instance of class.

Q.5. what is a class in java?

A class is a collection of item with similar characteristic. It serves as a model or blueprint from which things can be made. It makes sense as a whole it cannot be bodily.

In java, a class could include

- Fields
- Methods
- Constructors
- Blocks
- Nested class and interface.

Que 6 Explain main() method in java?

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. the syntax of the main() method is public; it is an access specifier we shoud use a public keyword before the main() method so that JVM can identify the execution point of the program.

static - You can make a method static by using the keyword static. with the help of static we can call the main() method without creating object. Static methods are the methods whic is invoke without creating the objects so wedo not need any object to call the main() method.

void - In java, every method has return type void keyword acknowledges the compiler that the main() method does not return any value.

main(): It is a default signature which is prepared in the JVM. it is called by JVM to execute a program line by line

String args[]: The main method also accepts some data from the user. It accepts a group of string whic is called a string array.

Return type Array of string type

Public static void main (String args[])

Access specifier keyword Method name

It is used to hold the command line arguments in the form of string value

Here args[] is the array name it is of String type. It means that it can store a group of string. Remember, this array can also store a group of number but in the form of string