Basic concept of OOP

1. WAP to print “Hello World” using C++

Ans:

#include <iostream>

using namespace std;

int main(){

cout<<"Hello world"<<endl;

}

1. What is OOP? List OOP concepts

Ans:

* OOP stands for object-oriented programming.
* Object-oriented programming is a computer programming model that organizes software design around data , or object, rather than function and logic.
* An object can be defined as a data field that has unique attributes and behaviour.
* List oop concepts :

1. Object:

Object are entities in the real world

1. Class:

Class is like a blueprint of these entities.

1. Encapsulation:

Encapsulation is wrapping up of data & data member functions in a single unit called class.

1. Constructor:

Special method invoked automatically at time of object creation. Used for initialization.

1. Inheritance:

When properties & member functions of base class are passed on to the derived class.

1. Polymorphism:

Polymorphism is the ability of objects to take on different forms or behave in different ways depending on the context in which they are used.

1. Abstraction:

Hiding all unnecessary details & showing only the important parts.

1. What is the difference between OOP and POP?

Ans:

OOP : Object-Oriented Programming

POP : Procedure-Oriented Programming

Difference :

* OOP:

1. Object-oriented.
2. Programs are divided into parts known as objects.
3. It follows bottom-up approch.
4. It has access specifiers such as public, private and protected.
5. It provides data hiding, data associated with the program.so security is provide.
6. Ease of modification.
7. Ex: Java, Perl, C++, python…

* POP:

1. Structure-oriented.
2. Programs are divided into functions.
3. It follows top-down approach.
4. In this most functions use global data.
5. POP does not have any specifiers.
6. POP does not provide any data security.
7. Modification is difficult.
8. Ex: C, Pascal…