Software EngineeringAssignment

OOPS Concept

Basic Concepts of OOP

```
Q1)WAP to print "Hello World" using C++
```

```
ANS.
(INPUT)

#include<iostream>
using namespace std;

main(){

cout<<"Hello World";
}
(OUTPUT)
```

Hello World

Q2)What is OOP? List OOP Concepts

ANS.

The object-oriented programming is basically a computer programming design philosophy or methodology that organizes/ models software design around data, or objects rather than functions and logic.

List OOP Concepts

- 1. Class
- 2. Objects
- 3. Inheritance
- 4. Encapsulation
- 5. Polymorphism
- 6. Abstraction

Q3)What is the difference between OOP and POP?

ANS.

OOP.

- Encapsulation, inheritance and polymorphism.
- Data and behavior bundled in objects
- Promotes code reusability and modularity
- Effective for managing complexity in large projects
- Objects encapsulate state for controlled manipulation

POP.

- Procedures or routines.
- Data and behavior are separate.
- Reusability through functions.
- May become cumbersome with complexity.
- State managed through variables, potentially leading to side effects.