Module 4.1 (C++ Basics)

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

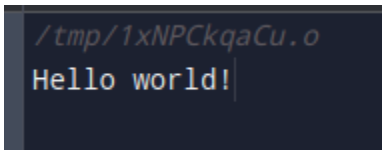
Code:

```cpp
#include <iostream>
// Including iostream for input/output operations
using namespace std;
// Declaring standard library

int main() {
   cout << "Hello world!";
   // Console out hello world

   return 0;
}
```

Output:



2. What is OOP? List OOP concepts?

Answer:

OOP stands for Object Oriented Programming. OOP is concept is based on objects. OOP concept emphasizes on objects rather than functions and logic.

List of OOP Concepts:

1) Class
2) Encapsulation
3) Object
4) Polymorphism
5) Abstraction
6) Inheritance

OOP Concepts:
Class: A class is a blueprint of a object

Object: Object is a data field which has unique attributes and behaviour.

Encapsulation: It's a process of wrapping up of data in a single unit.

Polymorphism: The word poly means many and morph means transform. So we can create single entity and can create multiple forms of it.

Abstraction: Abstraction means showing important information and hiding the background details.

Inheritance: Inheritance provides ability to inherit properties from parent to child.

3) What is the difference between POP and OOP?

Ans:

POP: POP stands for Process Oriented Programming. It follows a proper structure. In POP the code is read from TOP to BOTTOM.

OOP: OOP stands for Object Oriented Programming. It reads the code from BOTTOM to TOP. It primary focuses on Object, classes but not on function and subroutines.