CHAPTER 1

**INTRODUCTION TO OOP:**

Basic Program in CPP

#include<iostream> // Modern C++ headers do not use .h extension

using namespace std; //A namespace creates a declarative region in which various program elements can be placed.

int main()

{

int a,b,c;

cin>>a>>b;

c=a+b;

cout<<”Value:”<<c<<endl;

return 0;

}

OBJECT ORIENTED PROGRAMMING

**\*\*The main purpose of C++ programming is to add object orientation to the C programming language (Class & Object)**

**Class:** is a template/blueprint that describes the behaviors/states of an object. Classes are user defined data types that act like built in data types.

**Object:** is the instances of a class. Objects have states and behaviors. Example: A dog has states - color, name as well as behaviors - barking, eating.

***[ Note by -Jannatul Ferdous Umama(Bristy)***

**CLASS ACCESS MODIFIERS**

**PUBLIC:**

♣ a public member is accessible from anywhere outside the class but within a program

**PRIVATE:**

♣ A private member variable or function cannot be accessed, or even viewed from outside the class. Only the class and friend functions can access private members.

♣ By default all the members of a class would be private

♣ Practically, we define data in private section and related functions in public section so that they can be called from outside of the class.

**PROTECTED:**

♣ A protected member variable or function is very similar to a private member but it provided one additional benefit that they can be accessed in child classes which are called derived classes.

***[ Note by -Jannatul Ferdous Umama(Bristy)***