**LAB -1**

cin/cout basics, structures and classes

**Programming Question**

1. Write a program (WAP) to display "Hello World" on console display.
2. WAP to implement the following control characters:
3. ‘\n’ is for new line, or you can use *endl* – cout<<endl<<“message”;
4. ‘\t’ is for tab
5. ‘\a’ is an alarm sound
6. ‘\r’ is carriage return to go to the beginning of the current line
7. Implement *namespace* in a program to illustrate the use of same name variables and functions in different sections/libraries of the code.
8. Write a program to define a structure Student that contains 3 variables and 2 functions (a) Name (b) Roll (c) Marks and two functions (1) setStudentData(…) (2) getStudentData(…). Use loops to input and output 3 student object entries.

struct Student{

char name[20]; //string is also okay

int roll; float marks;

void setStudentData(){…}

void getStudentData(){…}

int main(){

Student s[3];

for(…){ set student data}

for(…) {get student data}

}

1. In the previous program make the data private, and functions public.
2. Convert program #4 from struct to class.
3. Discuss the differences of structures in C and structures in C++ during the lab with other students or your instructor.