**LAB 10**

**Lab Task. 10.1) Write a program that inputs, user grade A to F and display its comments according to grade entered.**

#include <iostream>

using namespace std;

//enum {A,B,C,D,E,F};

int main()

{

char Grade;

cout << "Enter your grade (A-F)" << endl;

cin>> Grade;

// while(Grade>=A&&Grade<=F)

{

switch(Grade)

{

case 'A':

cout<<"Your grade is A.\n";

cout<<"Excellent.\n";break;

case 'B':

cout<<"Your grade is B.\n";

cout<<"Very Good.\n";break;

case 'C':

cout<<"Your grade is C.\n";

cout<<"Good.\n";break;

case 'D':

cout<<"Your grade is D.\n";

cout<<"Satisfactory.\n";break;

case 'E':

cout<<"Your grade is E.\n";

cout<<"Unsatisfactory.\n";break;

case 'F':

cout<<"Your grade is f.\n";

cout<<"Fail.\n";break;

case 'a':

cout<<"Your grade is a.\n";

cout<<"Excellent.\n";break;

case 'b':

cout<<"Your grade is b.\n";

cout<<"Very Good.\n";break;

case 'c':

cout<<"Your grade is c.\n";

cout<<"Good.\n";break;

case 'd':

cout<<"Your grade is d.\n";

cout<<"Satisfactory.\n";break;

case 'e':

cout<<"Your grade is e.\n";

cout<<"Unsatisfactory.\n";break;

case 'f':

cout<<"Your grade is f.\n";

cout<<"Fail.\n";break;

default:

cout<<"Wrong Grade \n"<<endl;

}

//cout<<"Enter your grade (A-F)";

//cin>>Grade;

}

return 0;

}

**Lab Task. 10.2) Write a program that ask user for which shape you want to calculate area (Example Circle, square and triangle) and then take appropriate input from user to calculate**.

#include <iostream>

using namespace std;

int main()

{

enum{square, triangle, circle, rectangle};

int a,b,area,shape,r;

cout << "Enter the code of the shape for which area has to be calculated " << endl;

cout << "0 for square" << endl;

cout << "1 for triangle" << endl;

cout << "2 for circle" << endl;

cout << "3 for rectangle" << endl;

cin>>shape;

switch (shape)

{

case square:

cout << "Enter the length of the side of the square in meters " << endl;

cin>>a;

area=a\*a;

cout<<"area of Square is "<<area<<endl;

break;

case triangle:

cout << "Enter the width of the triangle" << endl;

cin>>a;

cout << "Enter the Height of the triangle " << endl;

cin>>b;

area=(a\*b)/2;

cout<<"area of Triangle is "<<area<<endl;

break;

case circle:

cout << "Enter the radius of the circle " << endl;

cin>>r;

area=3.15\*(r\*r);

cout<<"area of circle is "<<area<<endl;

break;

case rectangle:

cout << "Enter the height of the rectangle" << endl;

cin>>a;

cout << "Enter the width of the rectangle " << endl;

cin>>b;

area=a\*b;

cout<<"area of rectangle is "<<area<<endl;

break;

default:

cout << "Invalid input" << endl;

return -1;

}

return 0;

}