

**Submitted by:**

Burhan baig

**Roll no:**

460945

**Class:**

ME-15 (B)

**Computer programming C++**

#include <iostream>

using namespace std;

int main () {

// TASK 1:

double H,A; // This step creates two variables

H=1;

double N=6; // This step is used to find the factorial of 6

A=N\*(H+1)\*(H+2)\*(H+3)\*(H+4); // This is the factorial formula

cout<<"The factorial of 6 is: "<<A<<endl; // This step displays the answer

// TASK 2:

double x1,x2,y1,y2; // This step creates 4 variables for the input

// This step asks the user for the values of x1,x2

cout<<"Enter two values for (x1,x2):"<<endl;

cin>>x1>>x2;

// This step asks the user for the values of y1,y2

cout<<"Enter two values for (y1,y2):"<<endl;

cin>>y1>>y2;

// This step uses the formula for calculation of distance

double distance = (x2-x1)\*(x2-x1)+(y2-y1)\*(y2-y1);

cout<<"The distance between those points is:"<<distance<<endl;

// TASK 3:

double

length=0;

cout<<"Enter your length in cm:"<<endl;

cin>>length;

// These 2 steps assign a variable and then apply the respective formulas

double meter = length/100;

double kilometer = length /100000;

// For output in meters and kilometers

cout<<"Your length in meters is:"<<meter<<endl;

cout<<"Your length in kilomteres is:"<<kilometer<<endl;

// TASK 4:

double a,b;

cout<<"Enter values for a and b"<<endl;

cin>>a>>b; // This step records the inputted values by the user

double poly = (a\*a)+2\*(a\*b)+(b\*b); // Required formula for the calculation

cout<<"The polynomial's answer:"<<poly<<endl;

return 0;

}