**LAB MANUAL 1: -**

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ME 15 SECTION A

#include <iostream>

#include <cmath>

using namespace std;

int main()

{

**//TASK 1**

float a1, a2, b1, b2;

cout<< "enter coordinates of 1";

cin>>a1>>b1;

cout<< "enter coordinates of 2";

cin>>a2>>b2;

//define variales for sutraction of initial variales

float a\_diff=a2-a1;

float b\_diff=b2-b1;

//formula

float d=sqrt(a\_diff\*a\_diff+b\_diff\*b\_diff);

//answer

cout<<"distance= "<<d<<endl;

**//TASK 2**

float length;

cout<<"Enter length(cm) ";

//take length

cin>>length;

//convert

cout<<"length in meters "<<length/100<<endl;

cout<<"length in kilmeters "<<length/100000;

**//TASK 3**

float x, y;

//take input

cout<<"enter x ";

cin>>x;

cout<<"enter y ";

cin>>y;

float res=x\*x+2\*x\*y+y\*y;

//answer

cout<<"result: "<<res<<endl;

**//TASK 4**

float Frht, celc;

//take input

cout<<"temp in Fehrenheit: ";

cin>> Frht;

//convert

celc=(Frht-32)\*5/9;

//ANSWER

cout<<"Temp in cel: "<<celc<<endl;

return 0;

}