**CS-114 – Fundamental of Programing**

**Course Instructor: Dr Khwaja Fahad Iqbal**

**Lab Instructor: Muhammad Affan**

**LAB MANUAL #2**

**HOME TASK**

**ME 15 Section B**

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**Task 1:**

#include<iostream>

using namespace std;

int main()

{ int f;

f=6\*5\*4\*3\*2\*1;

cout<<”The factorial of 6 is :”<<f;

return 0;

}

**Task 2:**

**#include <iostream>**

**#include<cmath>**

**using namespace std;**

**int main()**

**{**

**double x1, x2, y1, y2, a, b, x, d;**

**cout<<”enter the x coordinate of the first point”<<endl;**

**cin>>x1;**

**cout<<”enter the y coordinate of the first point”<<endl;**

**cin>>y1;**

**cout<<”enter the x coordinate of the second point”<<endl;**

**cin>>x2;**

**cout<<”enter the y coordinate of the second point”<<endl;**

**cin>>y2;**

**a=x2-x1;**

**B=y2-y1;**

**b=pow(a,2)+pow(b,2);**

**x=pow(d,0.5);**

**cout<<”the distance between the two points is :”<<x;**

**return 0;**

**}**

**TASK 3:**

**#include <iostream>**

**Using namespace std;**

**Int main()**

**{ double cm, m, k;**

**cout<<”Enter the length in cm”<<endl;**

**cin>>cm;**

**m=cm/100;**

**k=cm/100000;**

**cout<<”The length in meters is:”<<m<<” and the length in km is: “<<k;**

**return 0;**

**}**

**TASK 4:**

**#include <iostream>**

**using namespace std;**

**int main()**

**{**

**double a, b, r;**

**cout<<”This program gives the result of the polynomial of the form a²+2ab+b². Enter the value of a “<<endl;**

**cin>>a;**

**cout<<”Enter the value of b”<<endl;**

**cin>>b;**

**r=a\*a+2\*a\*b+b\*b;**

**cout<<”The result is : “<<r;**

**return 0;**

**}**