

CS-114 – Fundamental of Programing

Course Instructor: Dr Khwaja Fahad Iqbal

Lab Instructor: Muhammad Affan

LAB MANUAL #2

HOME TASK

ME 15 Section B

Student Name : Ahmad Aleem Akhtar

CMS ID: 458945

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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  $a^2+2ab+b^2$ . 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;
}
```