NATIONAL UNIVERSITY OF SCIENCE & TECNOLOGY

SCHOOL OF MECHANICAL AND MANUFACTURING ENGINEERING

SEMESTER # 01

CLASS: - ME-15 [SEC A]

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[Fundamentals of programming]

ASSIGNMENT NUMBER 1

Task number 1

```
#include<iostream>
using namespace std;
int main()
{
float distance,x1, x2, y1, y2;
cout<<"Enter the first point x1 and y1.\n";
cin>>x1 >>y1;
cout<<"Enter second point x2 and y2.\n";
cin>>x2 >>y2;
distance=(x1-x2 )*(x1-x2) +(y1-y2 )*(y1-y2);
cout<<"Distance between two points is "<<distance<<endl;
}
```

Task number 2

```
#include<iostream>
using namespace std;
int main()
{
cout<<"Task number 2.\n";
float c,k,m;
cout<<"Converting centimeter into meter and kilometer .\n";
cout<<"Enter the distance (centimeter)\n";
cin>>c;
cout<<endl;

m=c/100;
k=c/100000;
cout<<"Equivalent distance in (meter) is.\n"<<m<<endl;
cout<<"Equivalent distance in (kilometer) is.\n"<<k;
cout<<endl;

}
```

Task number 3

```
#include<iostream>
using namespace std;
int main()
{

cout<<"Task number 3.\n";
float a;
float b;
float res=0;
cout<<"Calculate the value of polynomial.\n";
cout<<"Enter the value of a."<<endl;
cin>>a;
cout<<"Enter the value of b."<<endl;
cin>>b;
res=(a*a)+(2*a*b)+(b*b);
cout<<"The Answer is: "<<res<<endl;
}
```

Task number 4

```
#include<iostream>
using namespace std;
int main()
{
cout<<"Task number 4.\n";
float F, C;
cout<<"Convert fahrenheit to celsius. \n";
cout<<"Enter temperature in (fahrenheit) .\n";
cin>>F;
cout<<endl;
C=(F-32)*5/9;
cout<<endl;
cout<<"Equivalent temperature in celsius is.\n "<<C<<endl;
cout<<endl;
}
```