

```
// MUHAMMAD AHMAD RAZA
```

```
//467253
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```
//SECTION-B
```

```
#include<iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    int number=6,fact=1;           //DEFINING VARIABLES
```

```
    for(int i=number; i>=1; i--)  //APPLYING FOR LOOP
```

```
    {
```

```
        fact=fact*i;              //APPLYING FORMULA
```

```
    }
```

```
    cout<<fact;                   //TAKING OUTPUT
```

```
}
```

```
//PROJECT 2
```

```
#include<cmath>
```

```
int main(){
```

```

float d,x1,y1,x2,y2;    //DEFINING THE VARIABLES

cout<<"x1=";           //TAKIING INPUT VALUE OF "X1"

cin>>x1;

cout<<"x2=";           //TAKIING INPUT VALUE OF "X2"

cin>>x2;

cout<<"y1=";           //TAKIING INPUT VALUE OF "Y1"

cin>>y1;

cout<<"y2=";           //TAKIING INPUT VALUE OF "Y2"

cin>>y2;

d=sqrt(pow((x2-x1),2)+pow((y2-y1),2));    //APPLYING FORMULA OF DISTANCE BETWEEN TWO
POINTS

cout<<"DISTANCE="<<d;    //GETTING ANSWER OF DISTANCE

}

```

//PROJECT 3

```

float length,cm,met,km;    //DEFINING VARIABLES

int main(){

    cout<<"lenght in cm=";    //GIVING OUTPUT TO GET INPUT VALUE OF cm

    cin>>cm;

    met=cm/100;    //CONVERTING "cm" TO "meters"

    km=cm/100000;    //CONVERTING "cm" TO "kilometers"

    cout<<"lenght in meters="<<met<<endl<<"lenght in kilometers="<<km; //GETTING ANSWER IN
    "m" AND "km"

}

```

```
//PROJECT 4
```

```
float a,b, P;
```

```
//DEFINING VARIABLES
```

```
int main (){
```

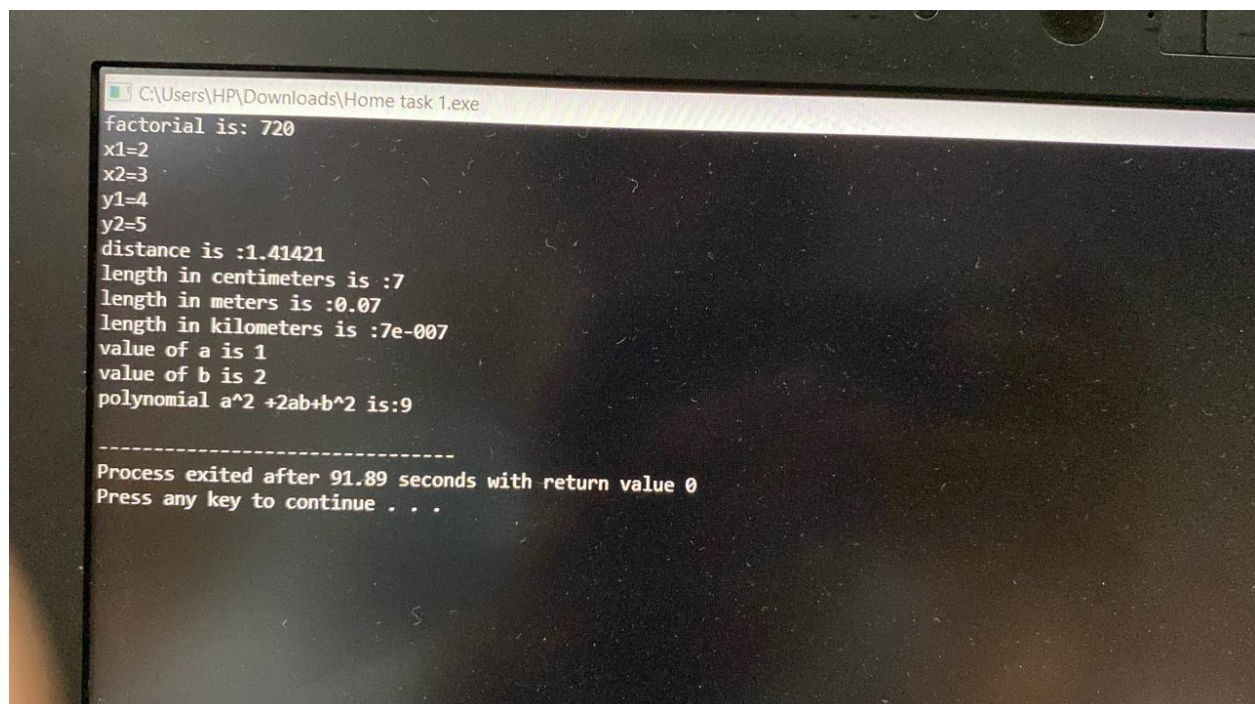
```
    cout<<"ENTER THE VALUE OF a AND b= "<<endl;    //GIVING OUTPUT TO GET INPUT VALUE  
    OF "a" AND "b"
```

```
    cin>>a>>b;
```

```
    P=(a*a)+(2*a*b)+(b*b);    //APPLYING FORMULA OF POLYNOMIAL
```

```
    cout<<P;    //GETTING ANSWER OF POLYNOMIAL
```

```
}
```



```
C:\Users\HP\Downloads\Home task 1.exe  
factorial is: 720  
x1=2  
x2=3  
y1=4  
y2=5  
distance is :1.41421  
length in centimeters is :7  
length in meters is :0.07  
length in kilometers is :7e-007  
value of a is 1  
value of b is 2  
polynomial a^2 +2ab+b^2 is:9  
  
-----  
Process exited after 91.89 seconds with return value 0  
Press any key to continue . . .
```