

1. Write a program in C++ to find the sum of first 10 natural numbers.

Code

```
#include<iostream>
using namespace std;
int main(){
    int b;
    b;
        for(int a=1;a<=10;a++){
    cout<<"Enter "<<a<<" natural number= "<<endl;
    cin>>b;
    }
    b=0;
    for(int a=1;a<=10;a++){

    b=b+a;
    }
    cout<<b;
    return 0;
}
```

Result:

```
Enter 1 natural number=
1
Enter 2 natural number=
2
Enter 3 natural number=
3
Enter 4 natural number=
4
Enter 5 natural number=
5
Enter 6 natural number=
6
Enter 7 natural number=
7
Enter 8 natural number=
8
Enter 9 natural number=
9
Enter 10 natural number=
10
55
-----
Process exited after 10.43 seconds with return value 0
Press any key to continue . . .
```

2. Write a C++ program to Print a Table of any Number.

Code

```
#include<iostream>

using namespace std;

int main(){
    int a;

    cout<<"enter number you want to get table ";

    cin>>a;

    for(int b=1;b<=10;b++){
        cout<<a<<" * "<<b<<" = "<<b*a<<endl;
    }

    return 0;
}
```

Result:

```
enter number you want to get table 5
5 * 1= 5
5 * 2= 10
5 * 3= 15
5 * 4= 20
5 * 5= 25
5 * 6= 30
5 * 7= 35
5 * 8= 40
5 * 9= 45
5 * 10= 50

-----
Process exited after 9.15 seconds with return value 0
Press any key to continue . . .
```

3. Write a Program to Generate Factorial. A Certain Number Factorial of any number is the product of an integer and all the integers below it for example factorial of 4 is: $4! = 4 * 3 * 2 * 1 = 24$

Code

```
#include<iostream>
using namespace std;
int main(){
    int a,c;
    cout<<"enter the number you want to get factorial ";
    cin>>c;
    a=c;
    int b=1;
    while(a>=1){
        b=b*a;
        a=a-1;
    }
    if(c=0){

        b=1;
    }
    cout<<c<<" ! = "<<b;
    return 0;
}
```

Result:

```
enter the number you want to get factorial 5
5 ! = 120
-----
Process exited after 2.135 seconds with return value 0
Press any key to continue . . .
```

4. Write a C++ program to generate a Fibonacci sequence up to a certain number input by the user.

Code

```
#include<iostream>
using namespace std;
int main(){
    int x,y;
    int b;
    cout<<"enter 1st number ";
    cin>>x;
    cout<<"enter 2nd number ";
    cin>>y;
    int z;
    cout<<"the fabocanni sequence is"<<endl;
    for(b=1;b<=9;b++){
        z = x+y;
        x=y;
        y=z;
        cout<<z<<endl;
    }
    return 0;
}
```

Result:

```
enter 1st number 0
enter 2nd number 1
the fabocanni sequence is
1
2
3
5
8
13
21
34
55

-----
Process exited after 5.411 seconds with return value 0
Press any key to continue . . .
```