

National University of Sciences & technology
Fundamentals of programming

Lab Tasks – 4

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Lab Task-1:

```
#include <iostream>

using namespace std;

int main() {

    int s,n,x;

    s=0;

    while(x<11){

        cout<<"Enter natural number:";

        cin>>n;

        s=s+n;

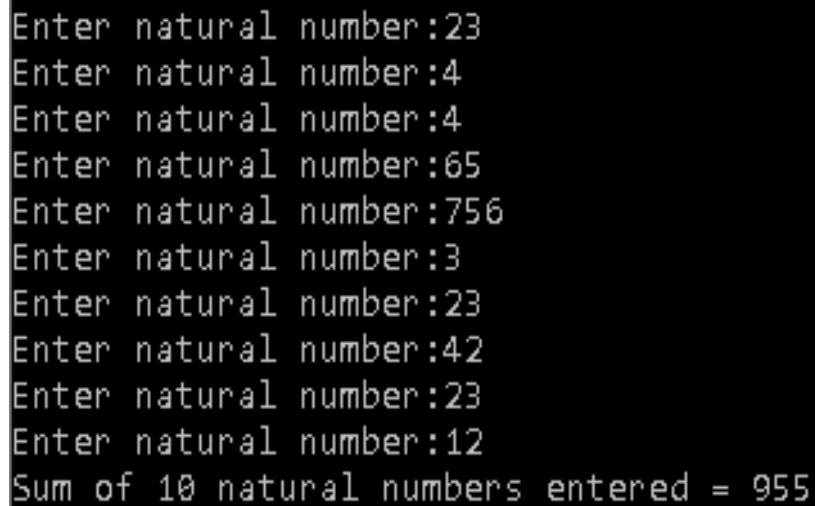
        x++;

    }

    cout<<"Sum of 10 natural numbers entered = "<<s;

    return 0;

}
```



```
Enter natural number:23
Enter natural number:4
Enter natural number:4
Enter natural number:65
Enter natural number:756
Enter natural number:3
Enter natural number:23
Enter natural number:42
Enter natural number:23
Enter natural number:12
Sum of 10 natural numbers entered = 955
```

Lab Task-2:

```
#include <iostream>

using namespace std;

int main() {

    int table,x;

    cout<<"Enter a number to get a table"<<endl;

    cin>>table;

    for(x=0;x<=10;x++){

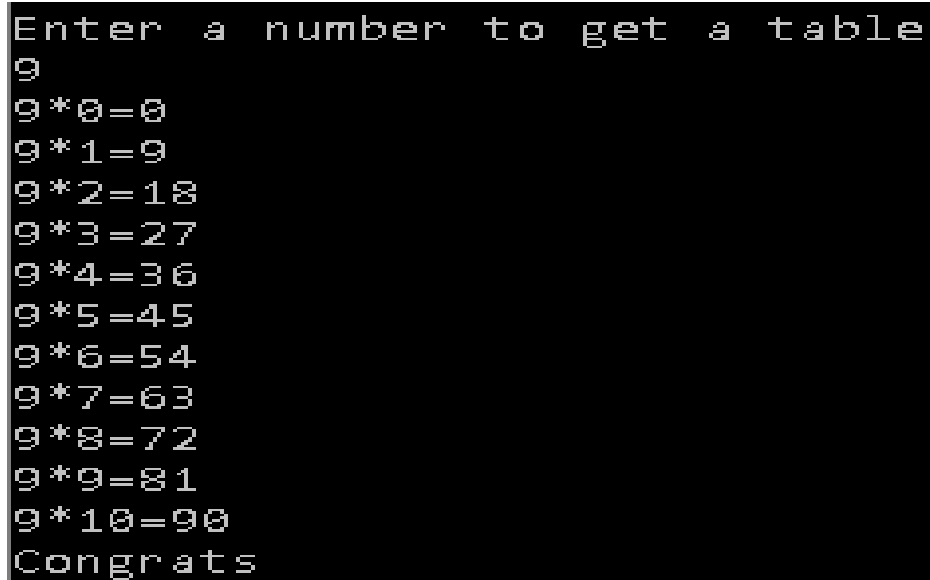
        cout<<table<<"*"<<x<<"="<<table*x<<endl;

    }

    cout<<"Congrats";

    return 0;

}
```



```
Enter a number to get a table
9
9*0=0
9*1=9
9*2=18
9*3=27
9*4=36
9*5=45
9*6=54
9*7=63
9*8=72
9*9=81
9*10=90
Congrats
```

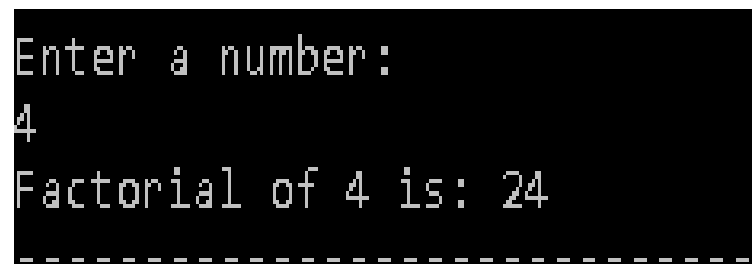
Lab Task-3:

```
#include <iostream>

using namespace std;

int main() {
    int number,i;
    int f=1;
    cout<<"Enter a number:"<<endl;
    cin>>number;
    int x=number;
    for(i=0;i<=x-1;i++){
        f=f*(number);
        number=number-1;
    }
    cout<<"Factorial of "<<x<<" is: "<<f;

    return 0;
}
```

A screenshot of a terminal window with a black background and white text. It shows the output of the C++ program: "Enter a number:", followed by the input "4", and then "Factorial of 4 is: 24". A dashed line is visible at the bottom of the terminal window.

```
Enter a number:
4
Factorial of 4 is: 24
-----
```

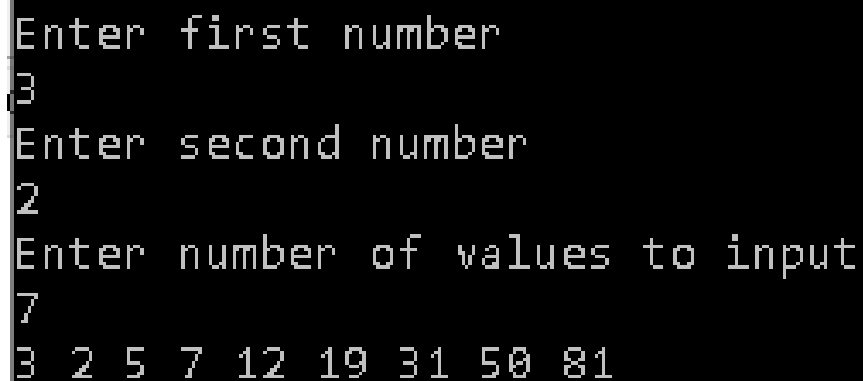
Lab Task-4:

```
#include <iostream>

using namespace std;

int main(){
    int number,i;
    int x,y,z;
    cout<<"Enter first number"<<endl;
    cin>>x;
    cout<<"Enter second number"<<endl;
    cin>>y;
    cout<<"Enter number of values to input"<<endl;
    cin>>number;
    for(i=0;i<number+2;i++){
        cout<<x<<" ";
        z=x+y;
        x=y;
        y=z;
    }

    return 0;
}
```

A screenshot of a terminal window with a black background and white text. It shows the output of the C++ program. The prompts are "Enter first number", "Enter second number", and "Enter number of values to input". The user has entered 3, 2, and 7 respectively. The final line of output is a sequence of numbers: 3 2 5 7 12 19 31 50 81.

```
Enter first number
3
Enter second number
2
Enter number of values to input
7
3 2 5 7 12 19 31 50 81
```