

LAB TASK (3)

ABDUL RAFEH

417648

PROGRAM NO:1

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    int sum = 0;
```

```
    for (int i = 1; i <= 10; i++) {
```

```
        sum += i;
```

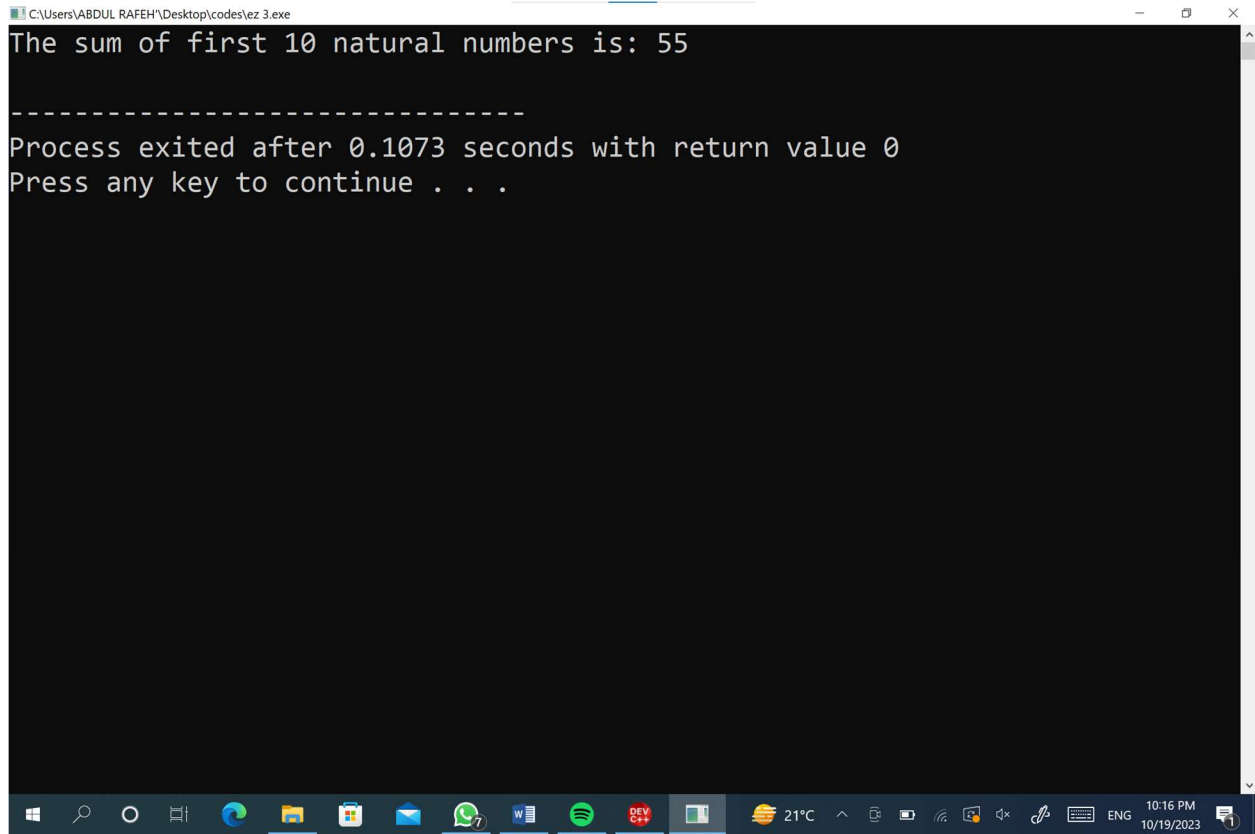
```
    }
```

```
    cout << "The sum of first 10 natural numbers is: " << sum << endl;
```

```
    return 0;
```

```
}
```

OUTPUT:



```
C:\Users\ABDUL RAFEH\Desktop\codes\ez 3.exe
The sum of first 10 natural numbers is: 55

-----
Process exited after 0.1073 seconds with return value 0
Press any key to continue . . .
```

Program 2:

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    int num;
```

```
    cout << "Enter a number to print the table: ";
```

```
    cin >> num;
```

```
    cout << "Table of " << num << endl;
```

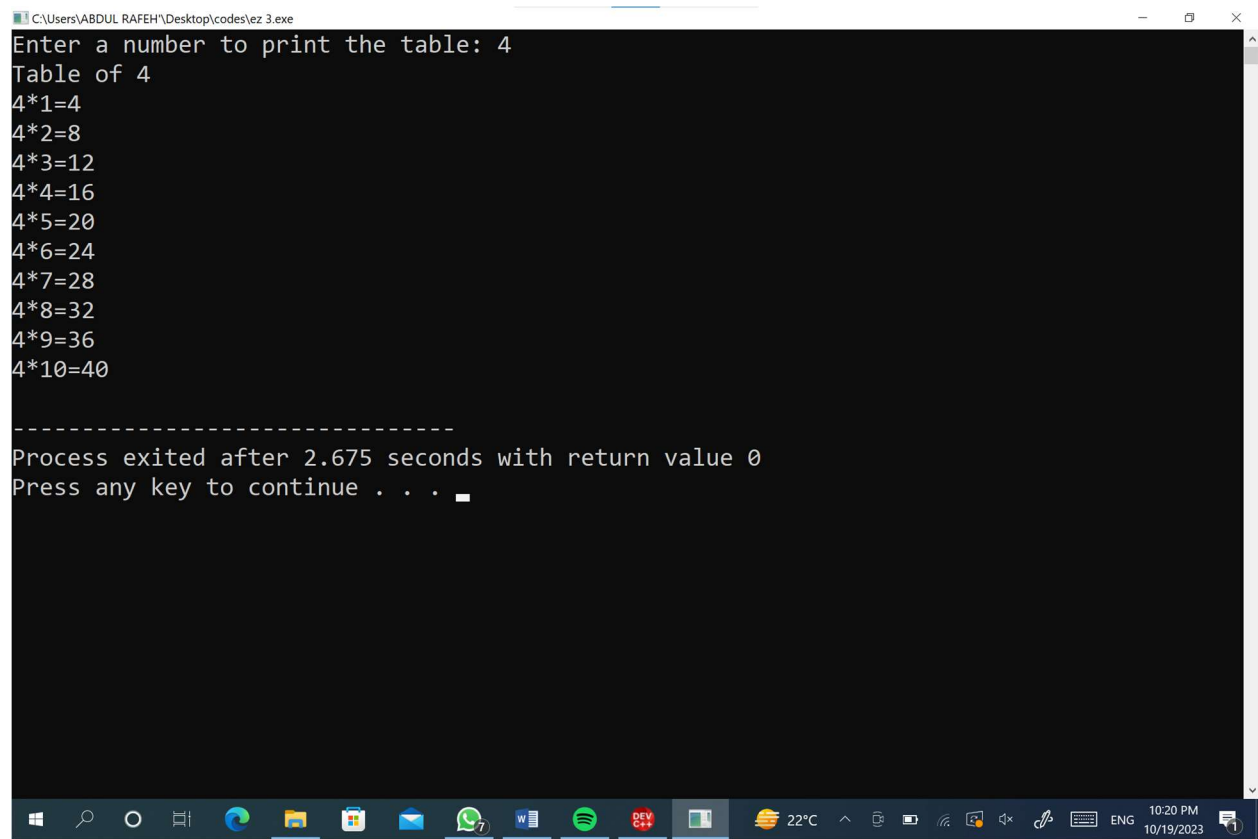
```

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

return 0;
}

```

OUTPUT:



```

C:\Users\ABDUL RAFEH\Desktop\codes\yez 3.exe
Enter a number to print the table: 4
Table of 4
4*1=4
4*2=8
4*3=12
4*4=16
4*5=20
4*6=24
4*7=28
4*8=32
4*9=36
4*10=40

-----
Process exited after 2.675 seconds with return value 0
Press any key to continue . . .

```

PROGRAM 3:

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {  
    int number, factorial = 1;  
  
    cout << "Enter a number: ";  
    cin >> number;  
  
    if (number < 0) {  
        cout << "Factorial of negative numbers is not defined." << endl;  
  
    }  
    else for (int i = 1; i <= number; i++) {  
        factorial *= i;  
    }  
    cout << "Factorial of " << number << " is: " << factorial << endl;  
  
    return 0;  
}
```

OUTPUT:

```
C:\Users\ABDUL RAFEH\Desktop\codes\vez 3.exe
Enter a number: 3
Factorial of 3 is: 6

-----
Process exited after 3.505 seconds with return value 0
Press any key to continue . . .
```

PROGRAM 4:

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    int n;
```

```
    cout << "Enter a number to generate the Fibonacci sequence up to: ";
```

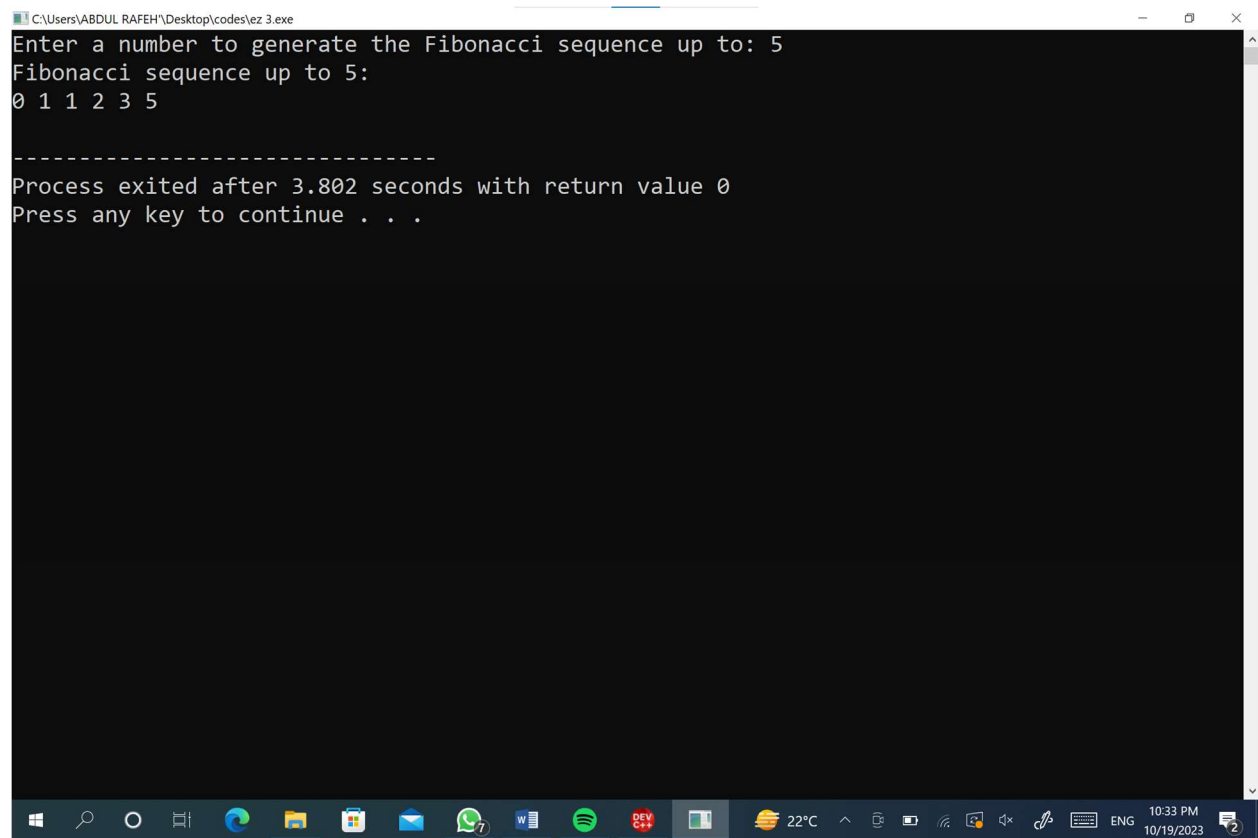
```
    cin >> n;
```

```
    int a = 0, b = 1;
```

```
    cout << "Fibonacci sequence up to " << n << ": " << endl;
```

```
cout << a << " " << b << " ";  
for (int i = 2; i <= n; i++) {  
    int c = a + b;  
    cout << c << " ";  
    a = b;  
    b = c;  
}  
cout << endl;  
  
return 0;  
}
```

OUTPUT:



```
C:\Users\ABDUL RAFEH\Desktop\codes\vez 3.exe  
Enter a number to generate the Fibonacci sequence up to: 5  
Fibonacci sequence up to 5:  
0 1 1 2 3 5  
  
-----  
Process exited after 3.802 seconds with return value 0  
Press any key to continue . . .
```

