

Fundamentals of Programming

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Section: ME-15A

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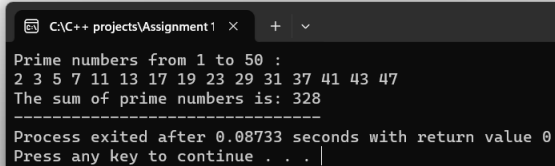
Task1:

// Write a program that adds only prime numbers from 1 to 50 using break or switch

```
{
    int sum=0;
    cout<<"Prime numbers from 1 to 50 : "<<endl;

    for (int num = 2; num <= 50; ++num) {
        int P = 1; // Prime

        for (int i = 2; i < num; ++i) {
            if (num % i == 0) {
                P = 0; // Not prime
                break;
            }
        }
        if (P==1) { // If 1 is not changed to 0, num is prime.
            cout << num << " ";
            sum=sum+num;
        }
    }
    cout<<"\n\nThe sum of prime numbers is: "<<sum;
    return 0;
}
```



C:\C++ projects\Assignment1 x + v

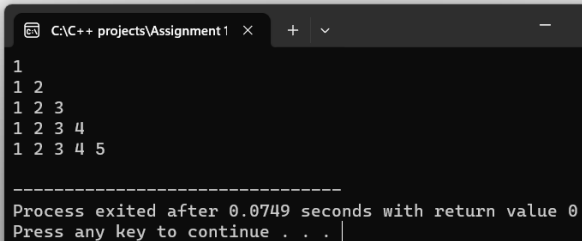
Prime numbers from 1 to 50 :
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47
The sum of prime numbers is: 328

Process exited after 0.08733 seconds with return value 0
Press any key to continue . . . |

Task2:

```
#include<iostream>
using namespace std;
```

```
int main()
{
    for(int r=1;r<=5;r++)
    {
        for (int c=1;c<=r;c++)
            cout<<c<<" ";
        cout<<endl;
    }
}
```



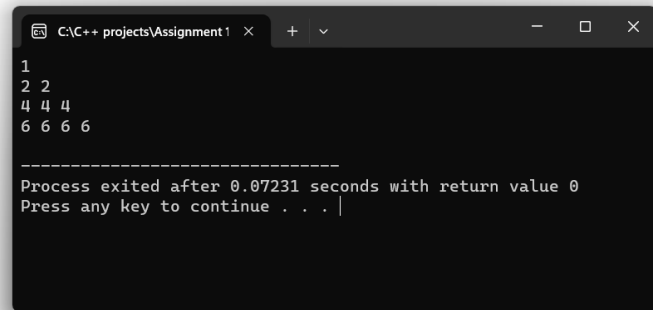
C:\C++ projects\Assignment1 x + v

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

Process exited after 0.0749 seconds with return value 0
Press any key to continue . . . |

Task3:

```
{
    for (int r = 1; r<=4; r++) {
        for (int c = 0; c < r; c++) {
            if(r==1)
                cout <<(2*r)-1;
            else
                cout<<(2*r)-2<<" ";
        }
        cout << endl;
    }
    return 0;
}
```



The screenshot shows a terminal window titled "C:\C++ projects\Assignment1". It displays the output of the C++ program, which is a pattern of numbers. The first four lines of output are: 1, 2 2, 4 4 4, and 6 6 6 6. Below these, there is a separator line of dashes, followed by the message "Process exited after 0.07231 seconds with return value 0" and "Press any key to continue . . .".

```
C:\C++ projects\Assignment1 x + - □ ×
1
2 2
4 4 4
6 6 6 6

-----
Process exited after 0.07231 seconds with return value 0
Press any key to continue . . .
```