Fundamentals of Programming
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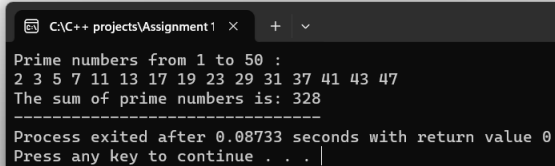
Section: ME-15A

Roll no: 464239

Task1:

```cpp
// Write a program that adds only prime numbers form 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<<"\nThe sum of prime numbers is: "<<sum;
    return 0;
}
```

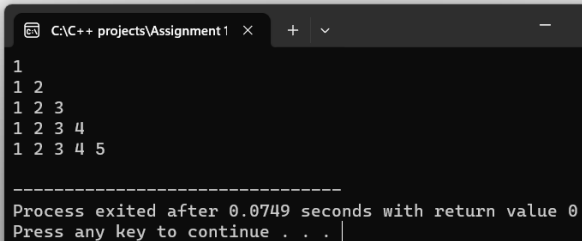```
C:\C++ projects\Assignment1

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:**

```cpp
#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;
    }
}
```
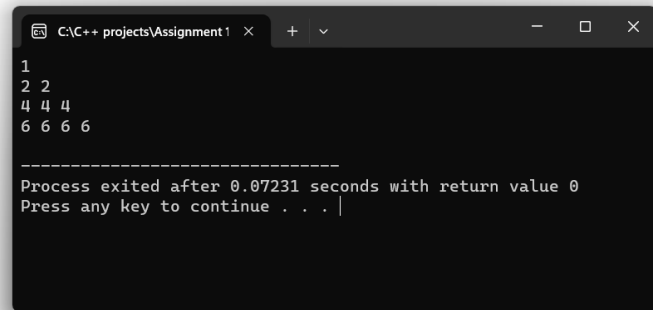
```
C:\C++ projects\Assignment1

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:

```cpp
{
    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;
}
```