# Fundamentals of Programming

## Home Task: 6

Name: Malik Haseeb

Section: B

Roll no: 468333

Submitted to : Sir M. Affan

# Task:1

Code:

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

int main() {
    int ans = 0 , x,y;
    for ( x = 2; x <= 50; x++) {
        bool prime = true;
        for ( y = 2; y < x; y++) {
            if (x % y == 0) {
                prime = false;
                break;
            }
        }
        if (prime==true) {
            ans += x;
        }
    }
    cout << "The sum of prime numbers between 1 and 50 is: " << ans << endl;
    return 0;
}
```

Output:
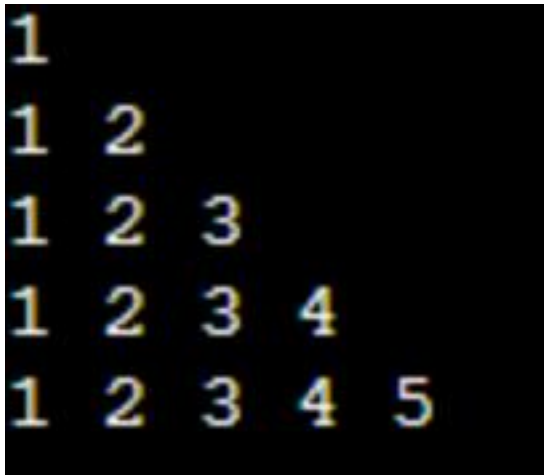
```
The sum of prime numbers between 1 and 50 is: 328
```

# Task: 2

Code:

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

int main() {
    for (int i = 1; i <= 5; i++) {
        for (int j = 1; j <= i; j++) {
            cout << j << " ";
        }
        cout << endl;
    }
    return 0;
}
```

Output:

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

# Task: 3

## Code:

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

int main() {
    int n = 2,a,b;
    cout<<"1"<<endl;
    for (int a = 1; a <= 6; a+=2) {
        for (int b = 0; b <= a; b++) {
            cout << n << " ";
        }
        n += 2;
        cout << endl;
    }
    return 0;
}
```

## Output:

```
1
2 2
4 4 4 4
6 6 6 6 6 6
```