Computer Systems and Programming Lab Manual 6 Home Task

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Class: ME-15 C

Q1. Write a program using break or continue statement that only adds prime numbers from 1 to 50 and displays the sum on the screen.

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

int main() {
    int sum=0;
    for (int i=2; i<=50; i++) {
        for (int j=2; j<=i; j++) {
            if (j%i==0 && i!=j) {
                break;
            }
            if (i==j) {
                sum=sum+i;
            }
        }
    }
    cout << "The sum of all prime numbers from 1 to 50 is " << sum << endl;
    return 0;
}
```

```
The sum of all prime numbers from 1 to 50 is 1274

Process returned 0 (0x0)    execution time : 0.036 s
Press any key to continue.
```

Q2. Write a program in C++ to create the following pattern:

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

```cpp
1       #include <iostream>
2       using namespace std;
3
4       int main() {
5           for (int i=1; i<=5; i++) {
6               for (int j=1; j<=i; j++) {
7                   cout << j << "   ";
8               }
9               cout << endl;
10          }
11          return 0;
12      }
13
```

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

Process returned 0 (0x0)   execution time : 0.046 s
Press any key to continue.
```

Q2. Write a C++ program to print:

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

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

int main() {
    cout <<1<<endl;
    for(int i=1;i<=6;i++){
        for(int j=1;j<=i;j++){
            if(i%2==0){
            cout <<i;
            }
        }
        cout<<endl;

    }
    return 0;
}
```

```
1

22

4444

666666

Process returned 0 (0x0)    execution time : 1.079 s
Press any key to continue.
|
```