

UNIVERSITY OF ENGINEERING AND TECHNOLOGY,TAXILA



SOFTWARE ENGINEERING

LAB-7 SOLUTION

SUBMITTED TO : MS.SABA AWAN

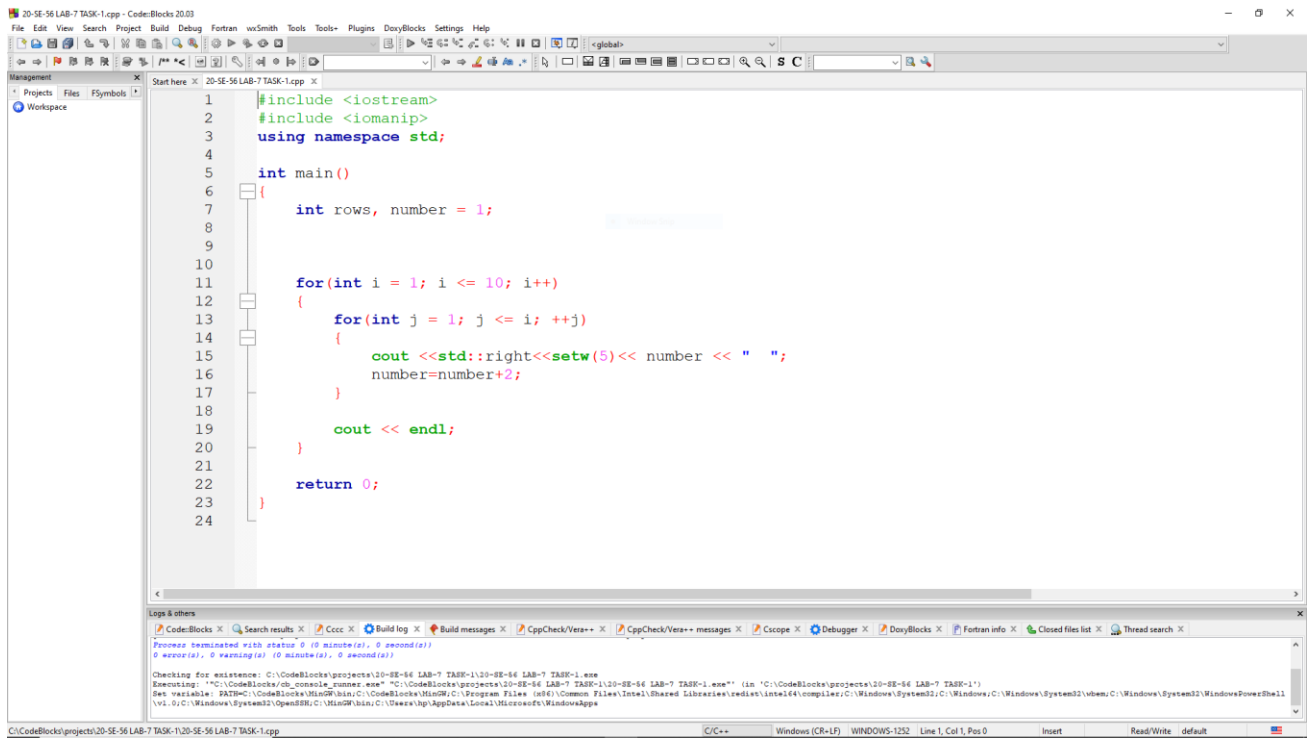
SUBMITTED BY : MUHAMMAD ARSALAN

REG NO : 20-SE-56

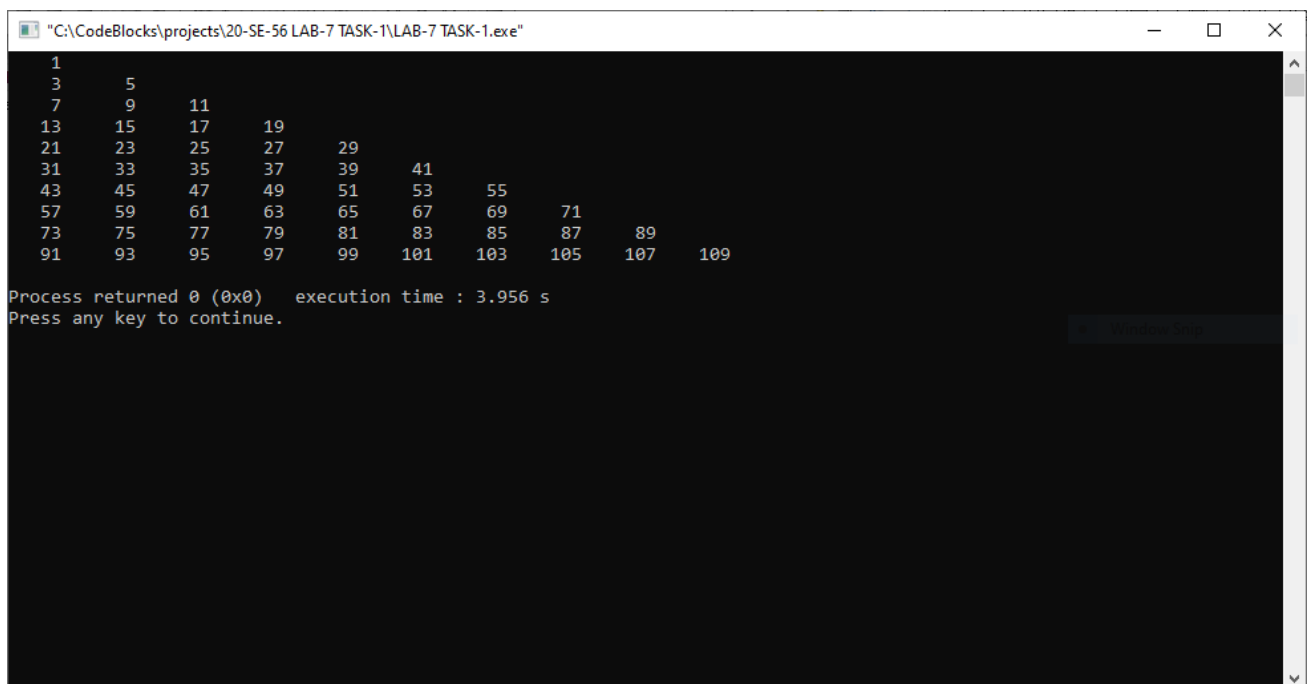
+++++

TASK-1

SOLUTION



```
1 #include <iostream>
2 #include <iomanip>
3 using namespace std;
4
5 int main()
6 {
7     int rows, number = 1;
8
9
10
11     for(int i = 1; i <= 10; i++)
12     {
13         for(int j = 1; j <= i; ++j)
14         {
15             cout << std::right << setw(5) << number << " ";
16             number = number + 2;
17         }
18
19         cout << endl;
20     }
21
22     return 0;
23 }
```

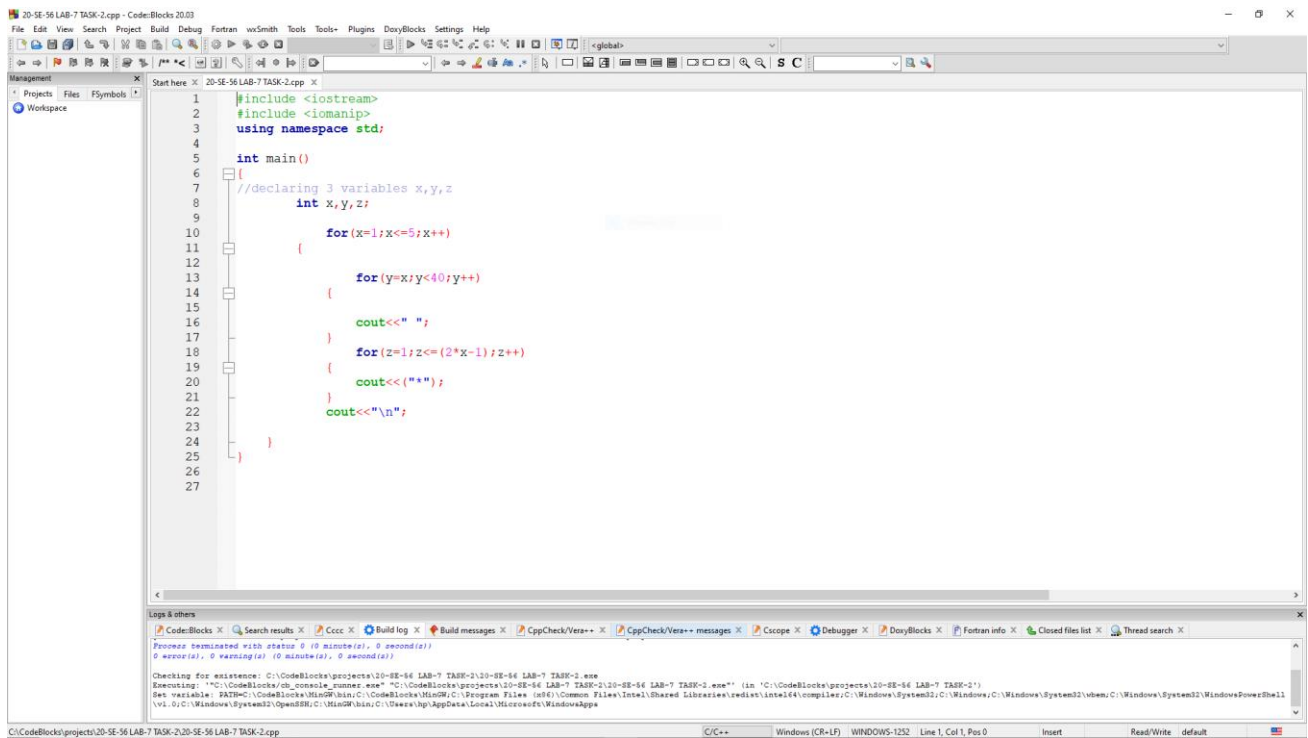


```
1
3 5
7 9 11
13 15 17 19
21 23 25 27 29
31 33 35 37 39 41
43 45 47 49 51 53 55
57 59 61 63 65 67 69 71
73 75 77 79 81 83 85 87 89
91 93 95 97 99 101 103 105 107 109

Process returned 0 (0x0)   execution time : 3.956 s
Press any key to continue.
```

TASK-2

SOLUTION



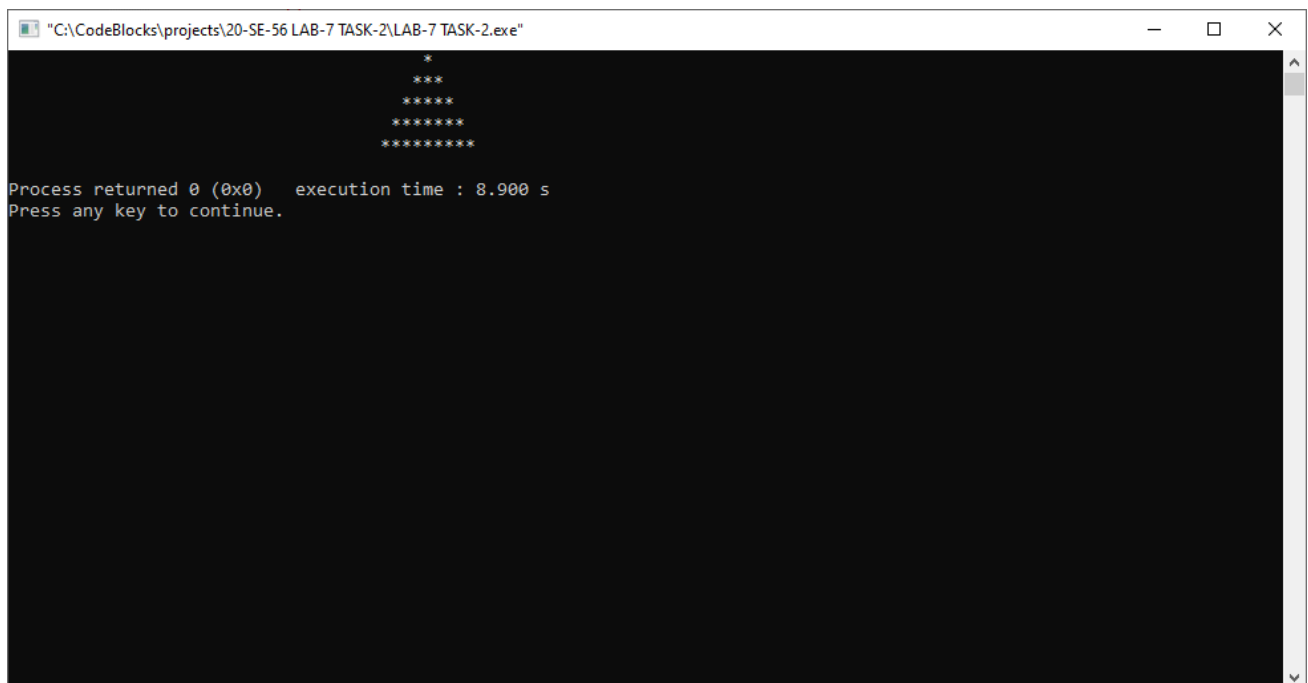
The screenshot shows the CodeBlocks IDE with a C++ program open. The program is a simple loop that prints a pattern of asterisks. The code is as follows:

```
1 | #include <iostream>
2 | #include <iomanip>
3 | using namespace std;
4 |
5 | int main()
6 | {
7 |     //declaring 3 variables x,y,z
8 |     int x,y,z;
9 |
10 |    for(x=1;x<=5;x++)
11 |    {
12 |
13 |        for(y=x;y<=40;y++)
14 |        {
15 |
16 |            cout<<" ";
17 |
18 |            for(z=1;z<=(2*x-1);z++)
19 |            {
20 |
21 |                cout<<"*";
22 |            }
23 |            cout<<"\n";
24 |        }
25 |    }
26 | }
```

The output window shows the following output:

```
*****
*****
*****
*****
*****

Process returned 0 (0x0)   execution time : 8.900 s
Press any key to continue.
```



The screenshot shows a command prompt window with the title "C:\CodeBlocks\projects\20-SE-56 LAB-7 TASK-2\LAB-7 TASK-2.exe". The output is the same as the one in the CodeBlocks IDE, showing a pattern of asterisks and the execution time.

```
*****
*****
*****
*****
*****

Process returned 0 (0x0)   execution time : 8.900 s
Press any key to continue.
```