

Introduction to C++ LAB # 01



Spring 2022

CSE-102L COMPUTER PROGRAMMING LAB

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Section: C

"On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work."

Student Signature: _____

Submitted to:

Engr. Abdullah Hamid

(July 2022)

Department of Computer Systems Engineering University of
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Lab 1: Introduction to C++

Objectives

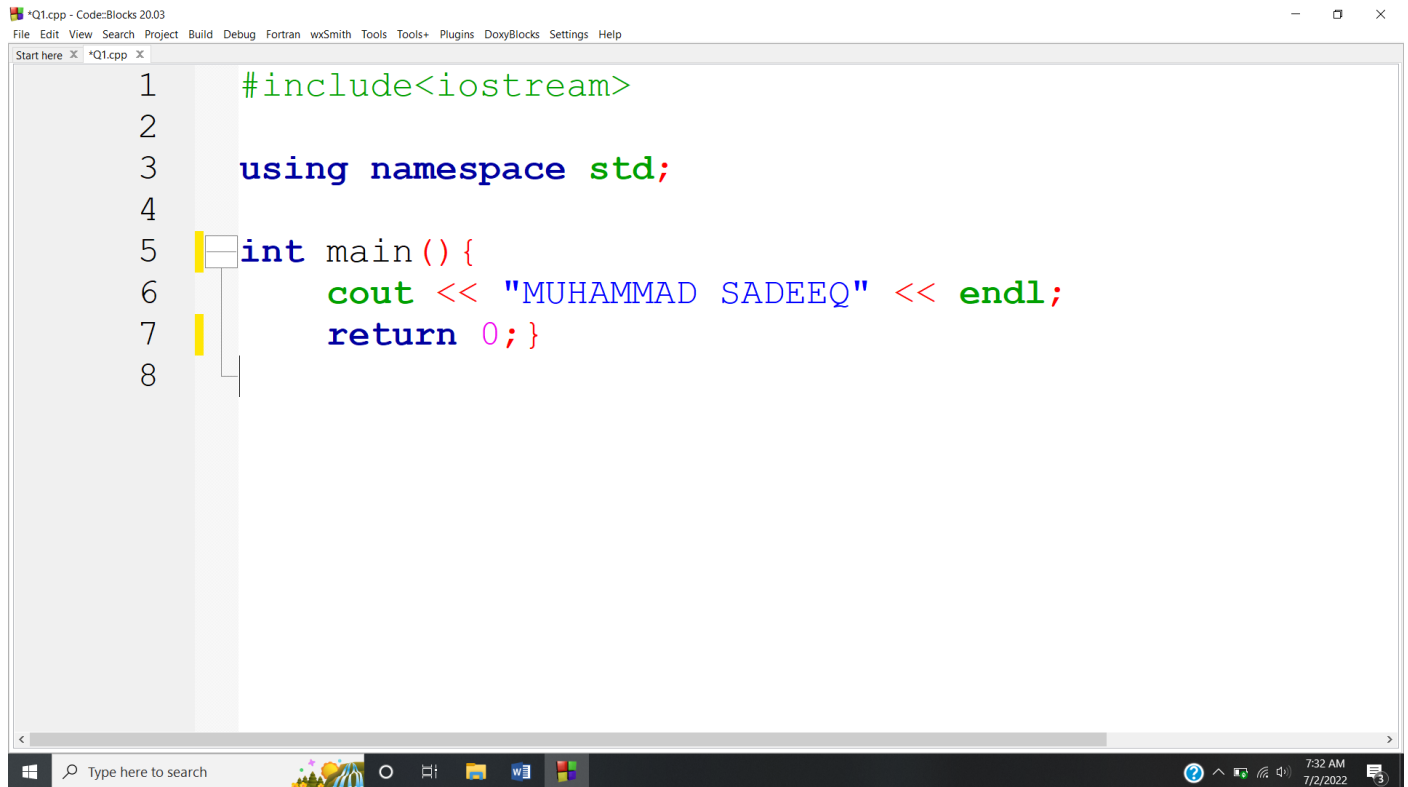
- To be able to install and use Dev C++ IDE for compiling C++ programs
- To be familiar with syntax and structure of C++ programming

Topics Discussed in Lab # 1

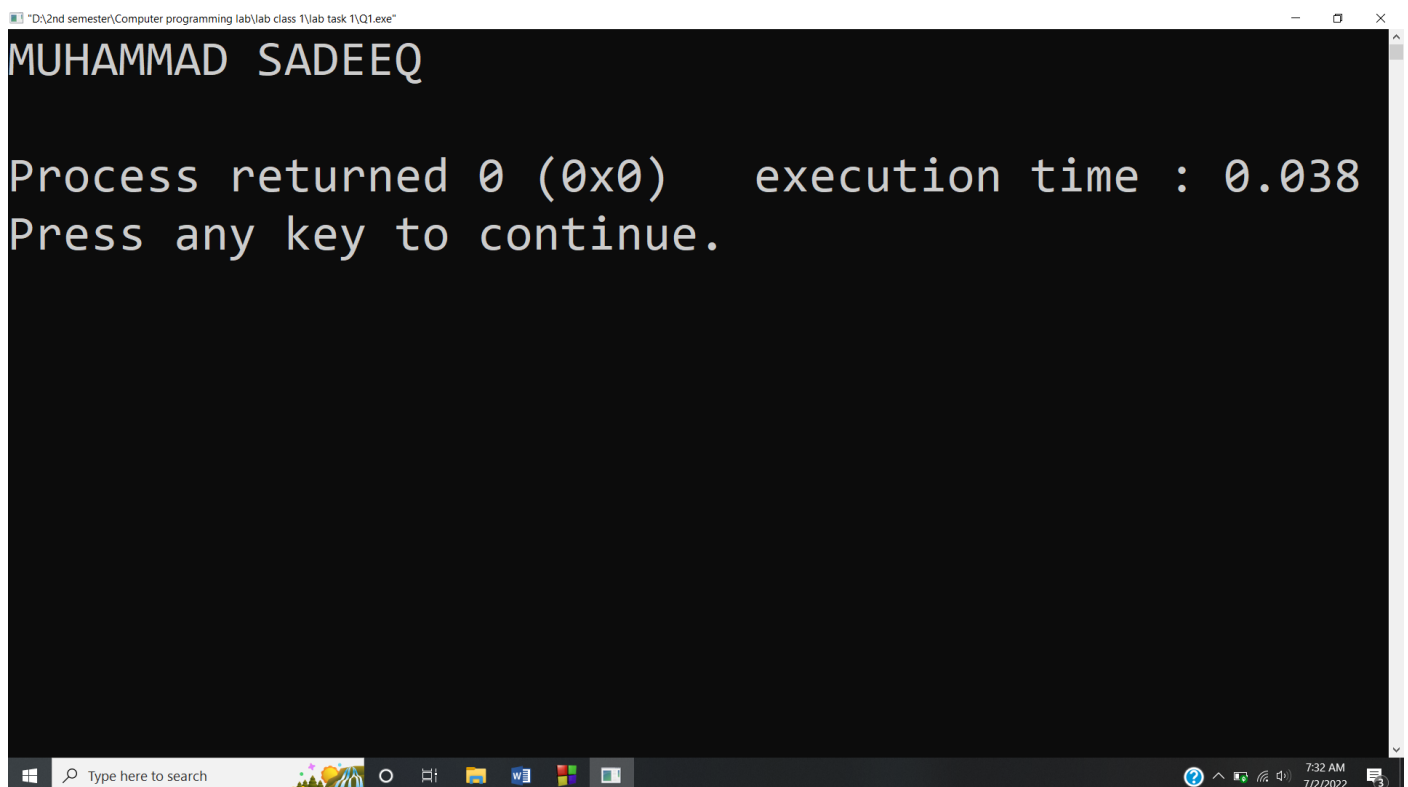
- Simple C++ Program and a Typical C++ Development Environment
- Test-Driving a C++
- Libraries
- Preprocessor Directives
- Variables and Data Types

Lab Tasks:

1. Write a program to display your name on console.
2. Write a program to add two numbers ($6+3=$) and display its sum.
3. Write a program to multiply three numbers ($5 \times 5 \times 5=$) and display its product.
4. Write a program to find the mod of ($5\%2=$) and ($6\%2=$)
5. Write a program to calculate area of a circle having its radius (ask user to input radius).
6. Write a program to calculate area of an ellipse having its axes (ask user to input values of major, minor)

COMPUTER PROGRAMMING LAB # 1**Answer #1****CODE:**

```
1  #include<iostream>
2
3  using namespace std;
4
5  int main(){
6      cout << "MUHAMMAD SADEEQ" << endl;
7      return 0;}
8
```

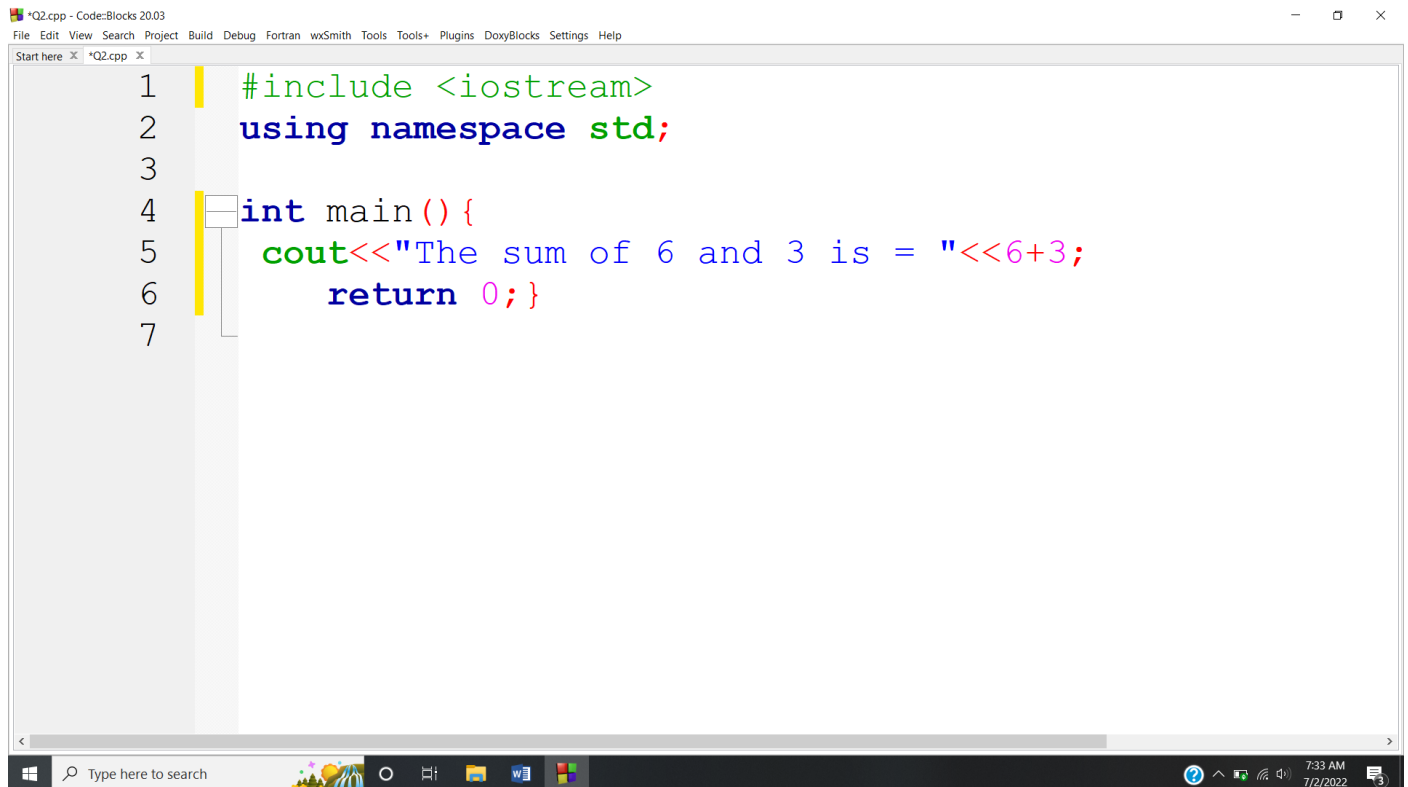
OUTPUT:

```
"D:\2nd semester\Computer programming lab\lab class 1\lab task 1\Q1.exe"
MUHAMMAD SADEEQ

Process returned 0 (0x0)    execution time : 0.038
Press any key to continue.
```

Answer #2

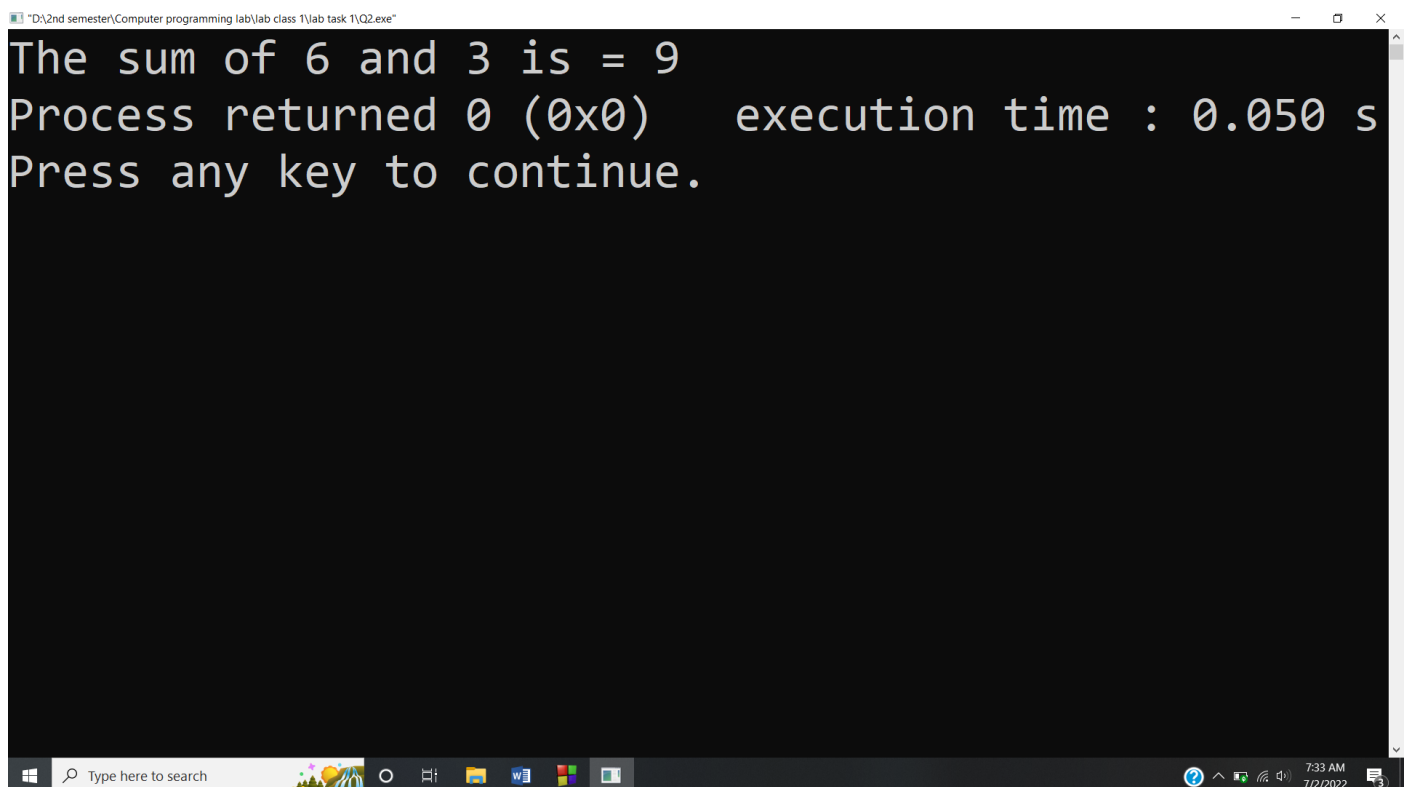
CODE:



```
*Q2.cpp - Code::Blocks 20.03
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Start here x *Q2.cpp x
1  #include <iostream>
2  using namespace std;
3
4  int main(){
5      cout<<"The sum of 6 and 3 is = "<<6+3;
6      return 0;}
7
```

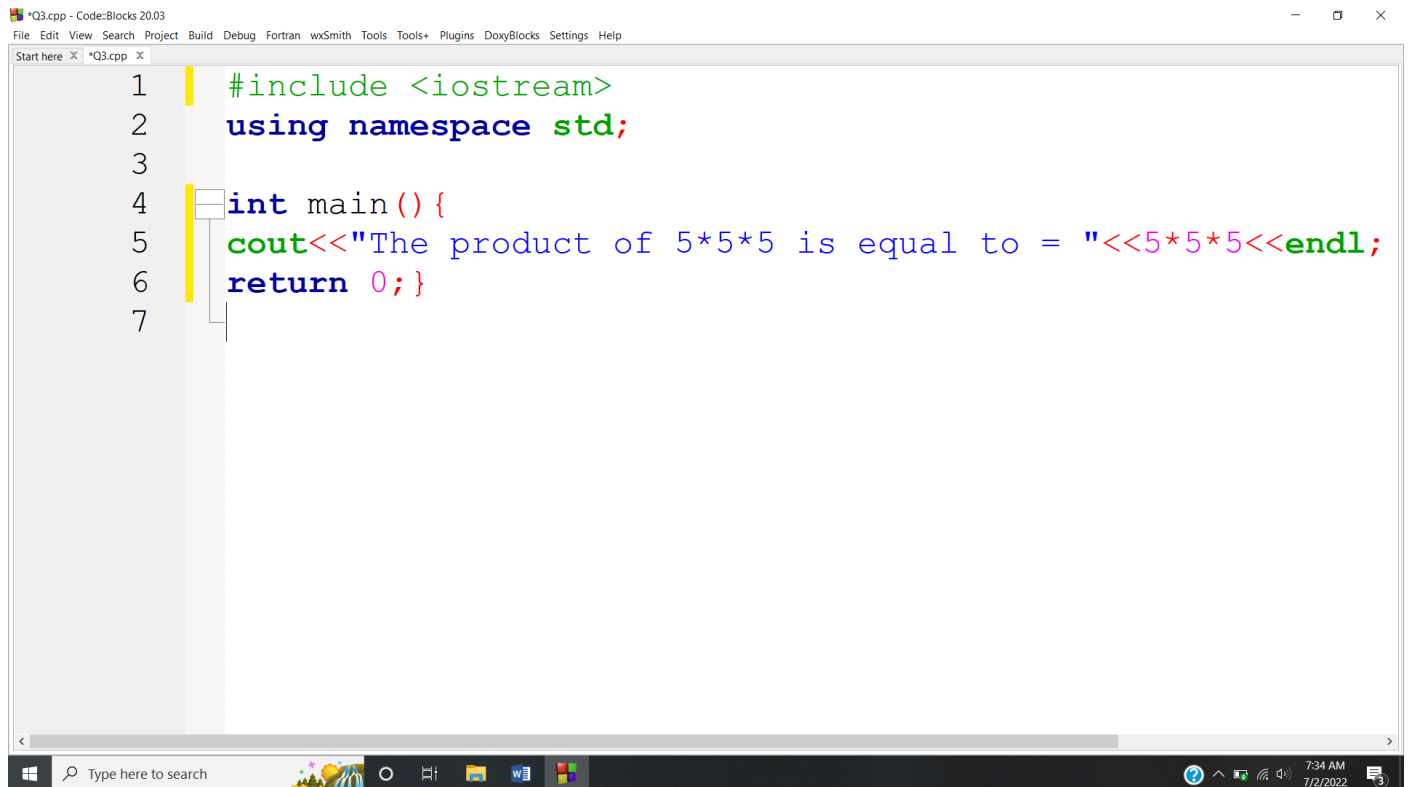
OUTPUT:



```
"D:\2nd semester\Computer programming lab\lab class 1\lab task 1\Q2.exe"
The sum of 6 and 3 is = 9
Process returned 0 (0x0)    execution time : 0.050 s
Press any key to continue.
```

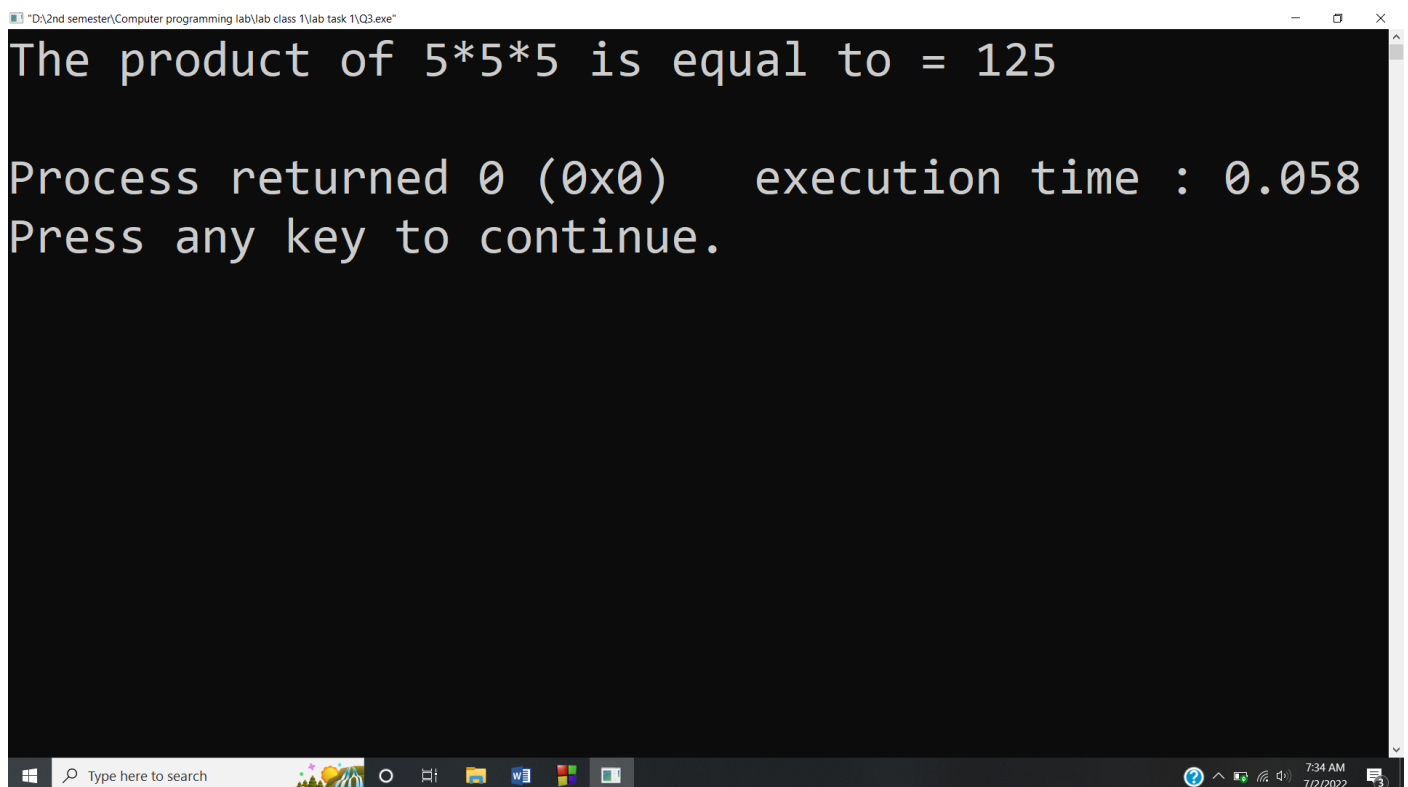
Answer #3

CODE:



```
*Q3.cpp - Code::Blocks 20.03
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Start here x *Q3.cpp x
1  #include <iostream>
2  using namespace std;
3
4  int main() {
5      cout<<"The product of 5*5*5 is equal to = "<<5*5*5<<endl;
6      return 0;}
7
```

OUTPUT:

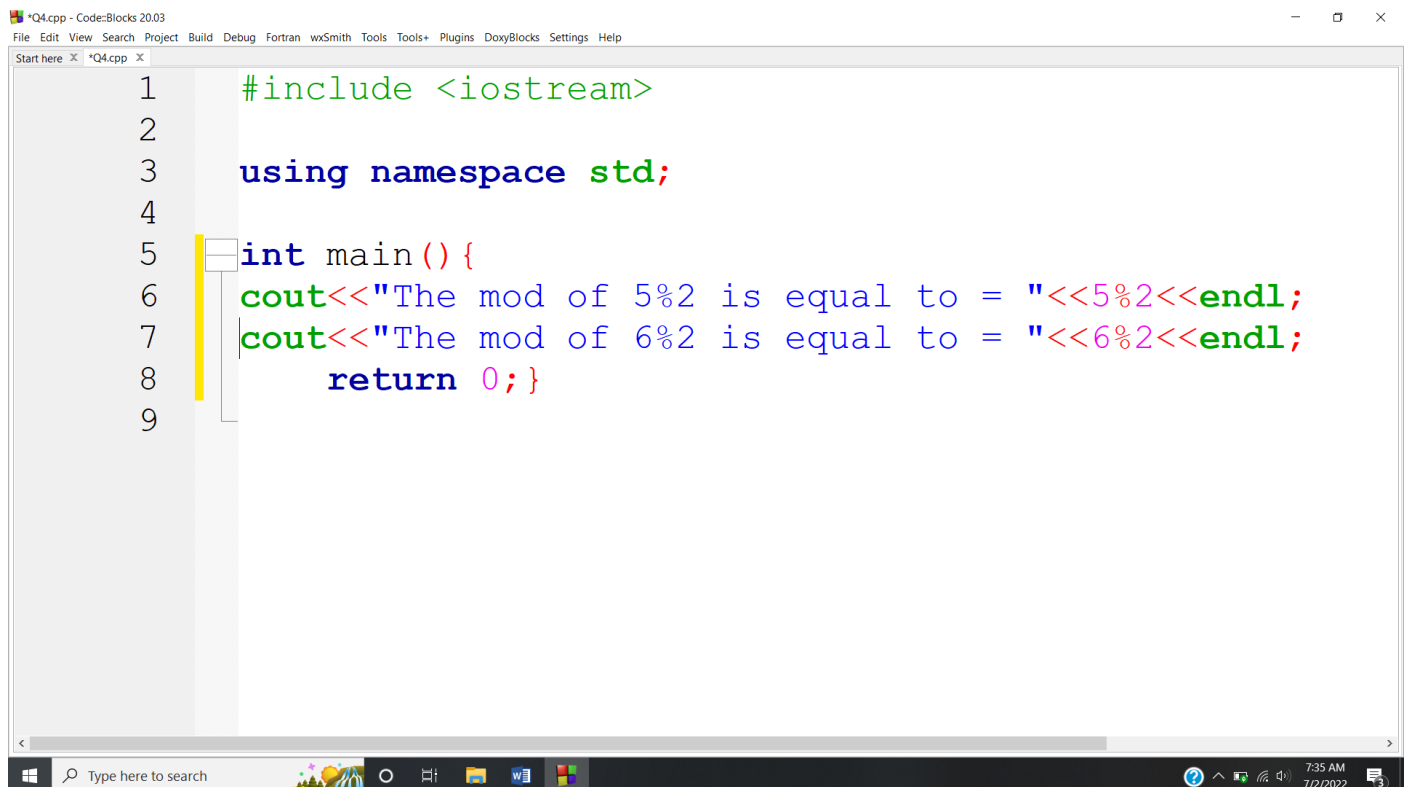


```
"D:\2nd semester\Computer programming lab\lab class 1\lab task 1\Q3.exe"
The product of 5*5*5 is equal to = 125

Process returned 0 (0x0)    execution time : 0.058
Press any key to continue.
```

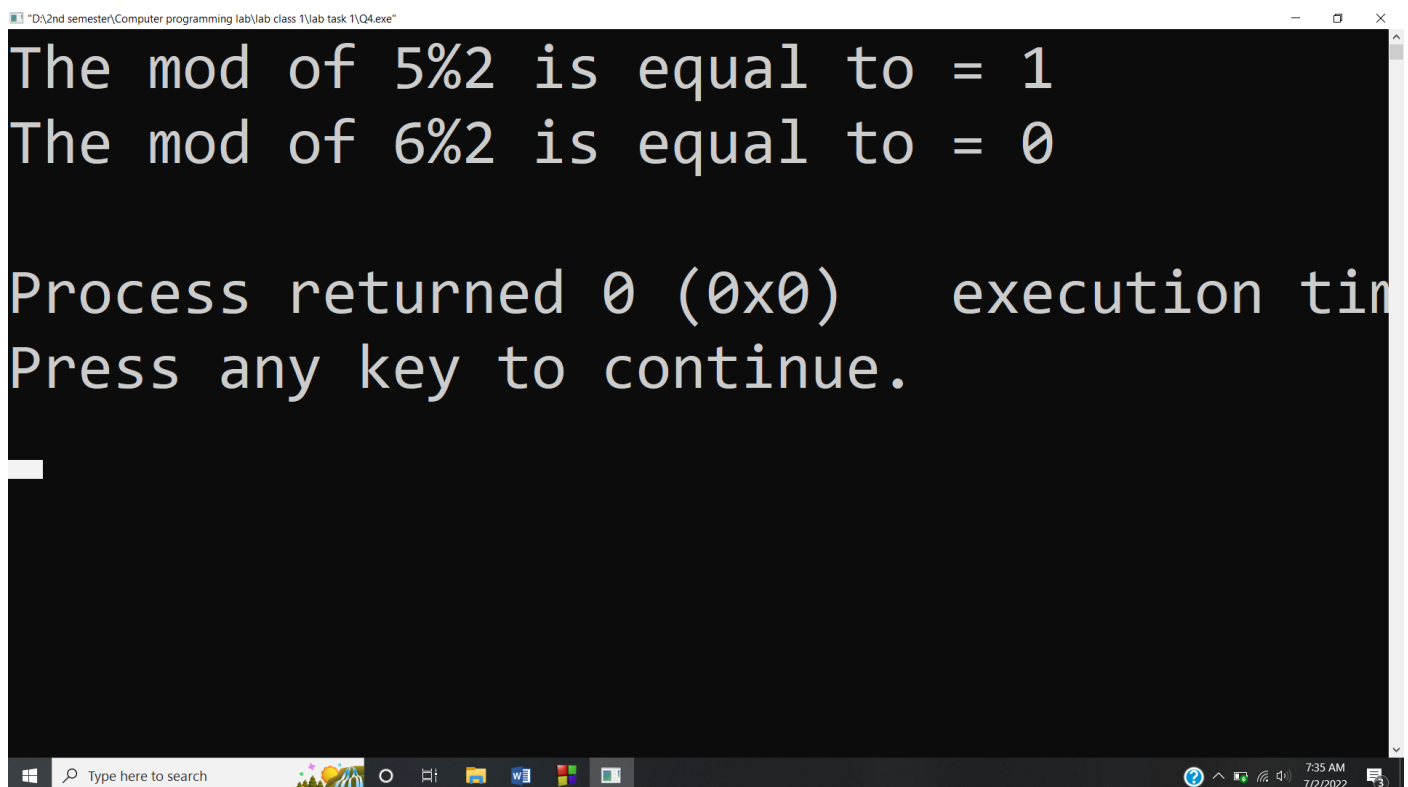
Answer #4

CODE:



```
*Q4.cpp - Code::Blocks 20.03
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Start here x *Q4.cpp x
1      #include <iostream>
2
3      using namespace std;
4
5      int main() {
6          cout<<"The mod of 5%2 is equal to = "<<5%2<<endl;
7          cout<<"The mod of 6%2 is equal to = "<<6%2<<endl;
8          return 0;}
9
```

OUTPUT:

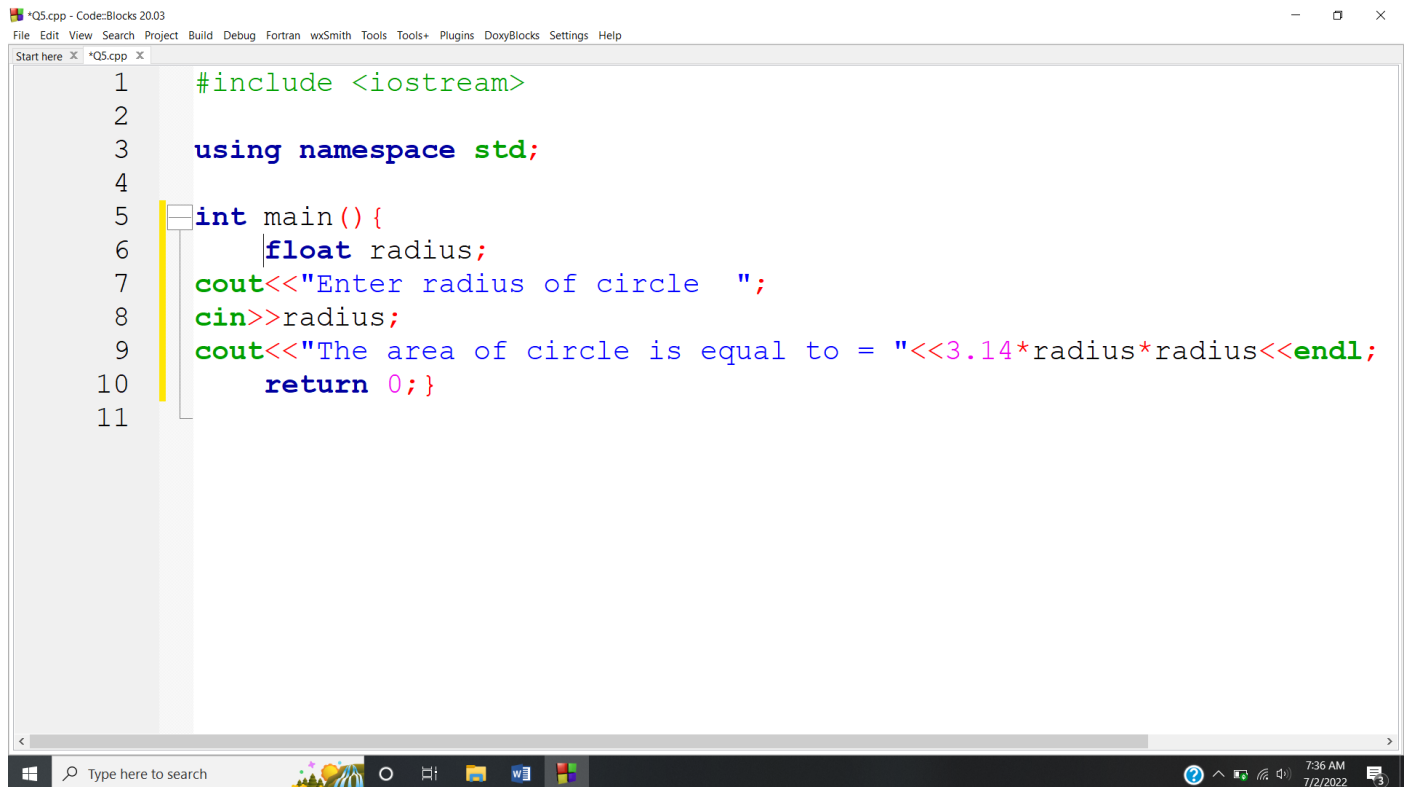


```
"D:\2nd semester\Computer programming lab\lab class 1\lab task 1\Q4.exe"
The mod of 5%2 is equal to = 1
The mod of 6%2 is equal to = 0

Process returned 0 (0x0)   execution time = 0.000 sec
Press any key to continue.
```

Answer #5

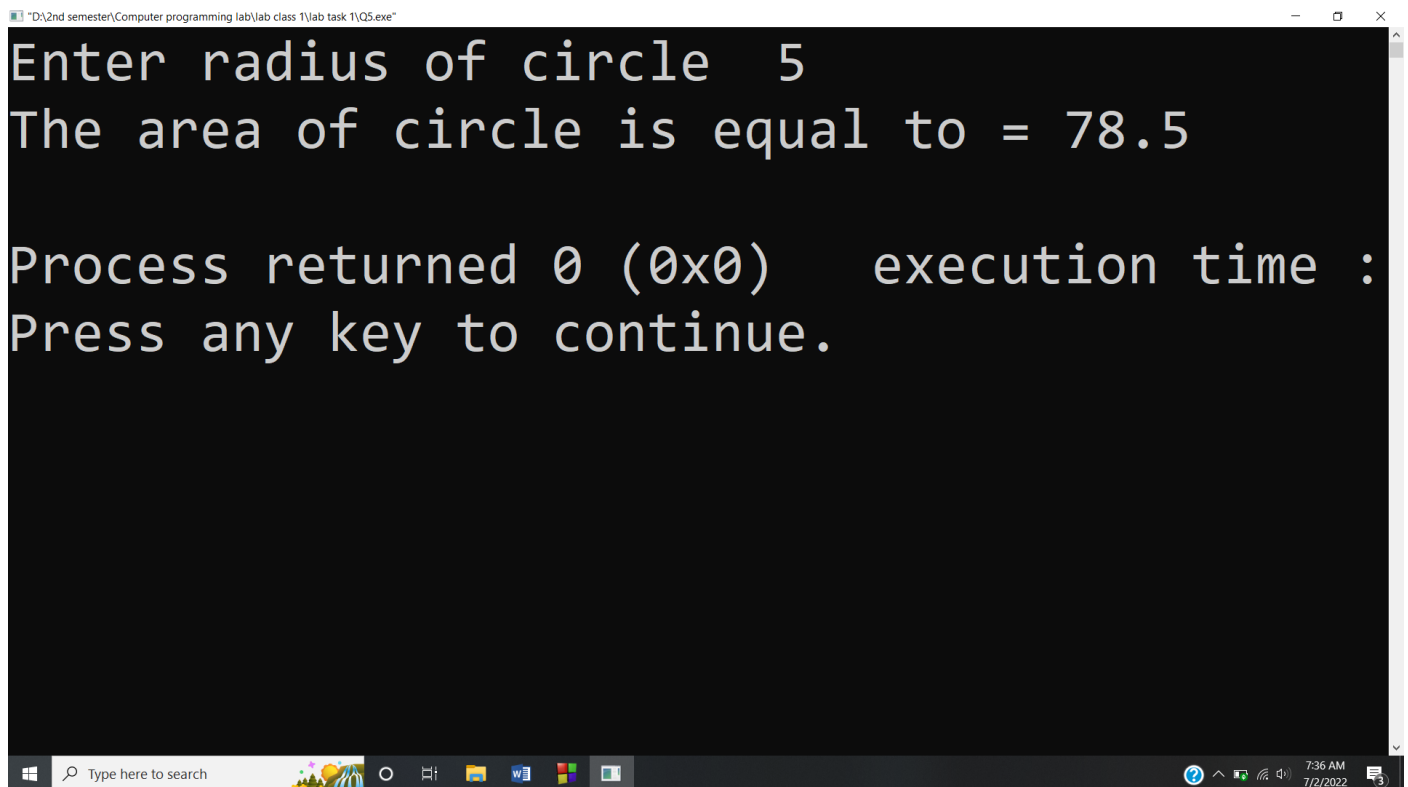
CODE:



```
*Q5.cpp - Code::Blocks 20.03
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Start here x *Q5.cpp x
1  #include <iostream>
2
3  using namespace std;
4
5  int main(){
6      float radius;
7      cout<<"Enter radius of circle ";
8      cin>>radius;
9      cout<<"The area of circle is equal to = "<<3.14*radius*radius<<endl;
10     return 0;}
11
```

OUTPUT:

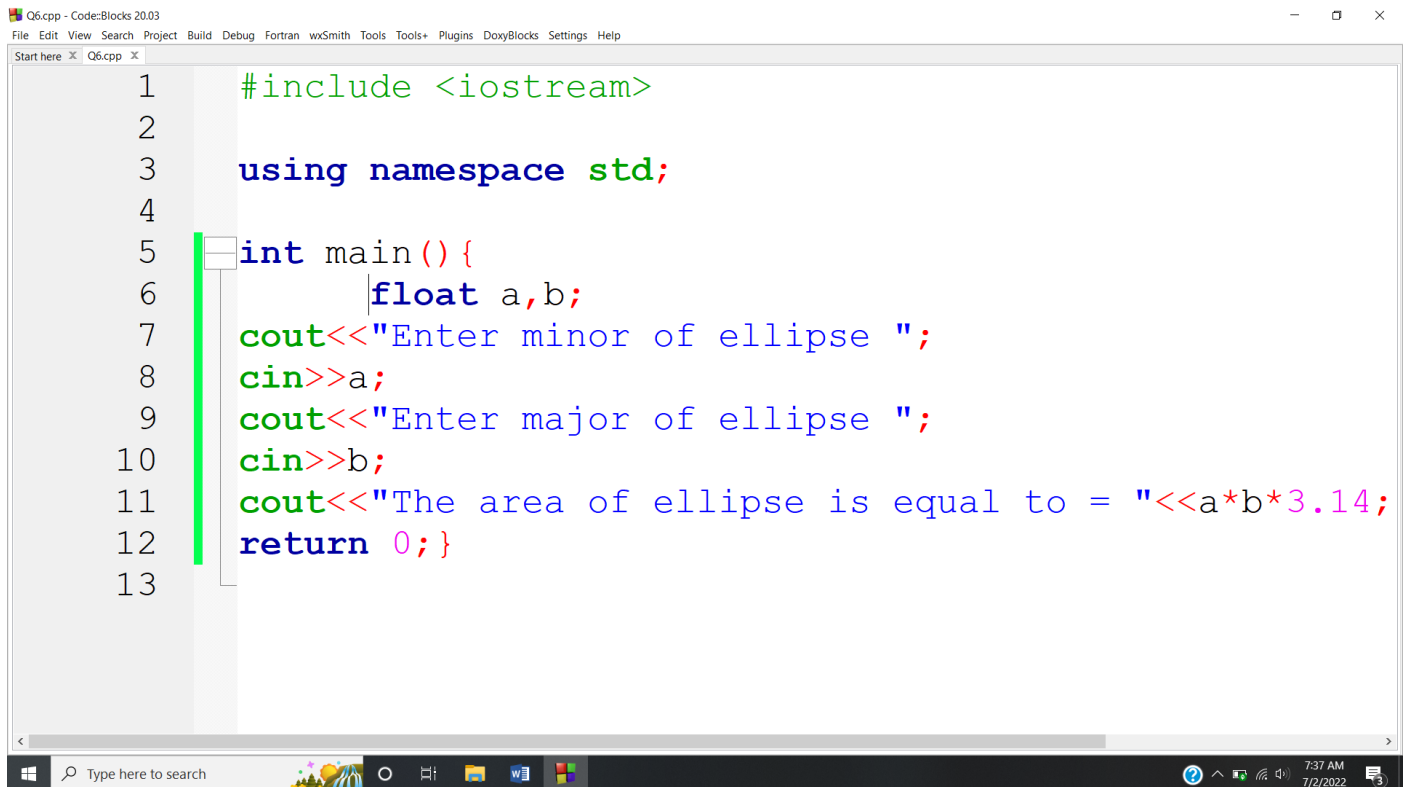


```
"D:\2nd semester\Computer programming lab\lab class 1\lab task 1\Q5.exe"
Enter radius of circle 5
The area of circle is equal to = 78.5

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

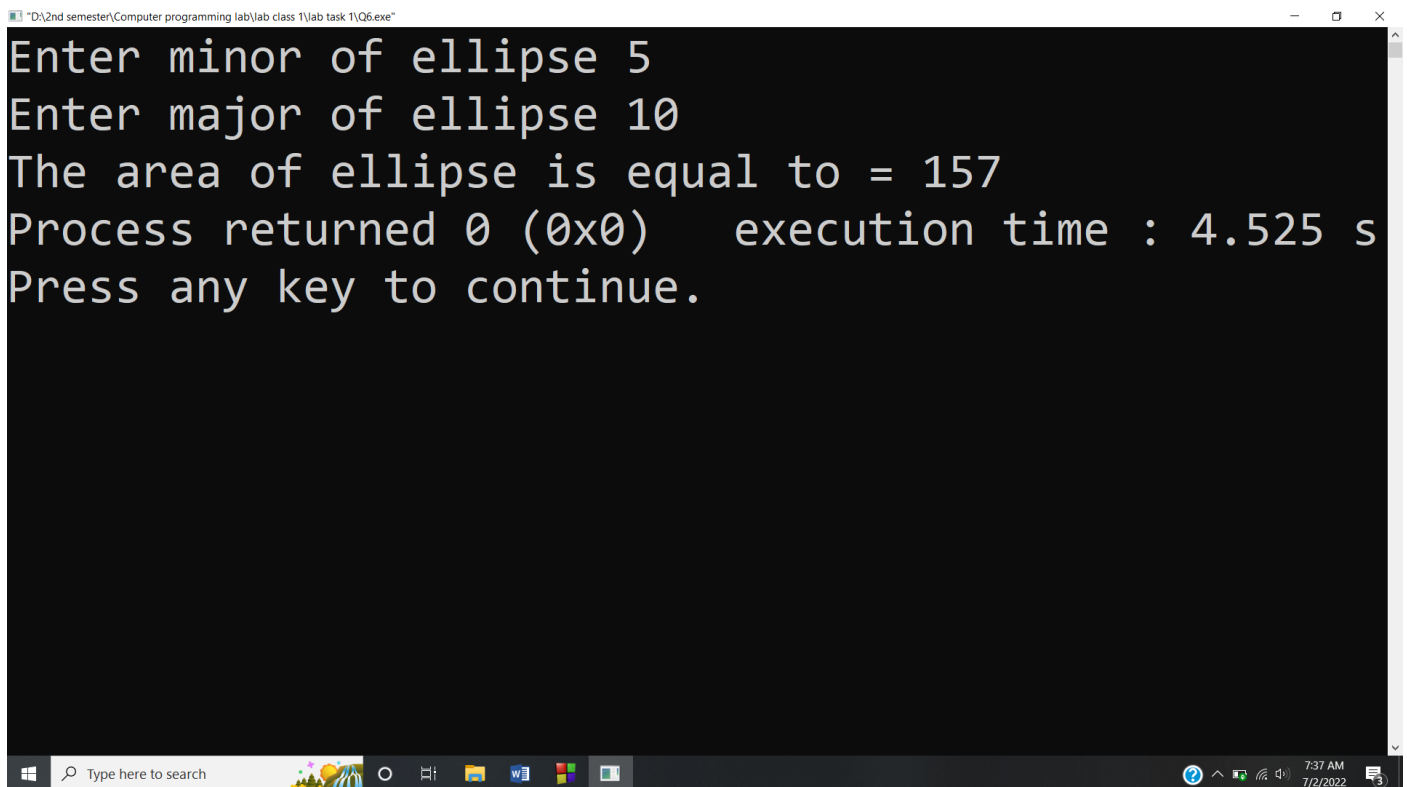
Answer #6

CODE:



```
Q6.cpp - Code::Blocks 20.03
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Start here x Q6.cpp x
1      #include <iostream>
2
3      using namespace std;
4
5      int main(){
6          float a,b;
7          cout<<"Enter minor of ellipse ";
8          cin>>a;
9          cout<<"Enter major of ellipse ";
10         cin>>b;
11         cout<<"The area of ellipse is equal to = "<<a*b*3.14;
12         return 0; }
13
```

OUTPUT:



```
"D:\2nd semester\Computer programming lab\lab class 1\lab task 1\Q6.exe"
Enter minor of ellipse 5
Enter major of ellipse 10
The area of ellipse is equal to = 157
Process returned 0 (0x0)    execution time : 4.525 s
Press any key to continue.
```