

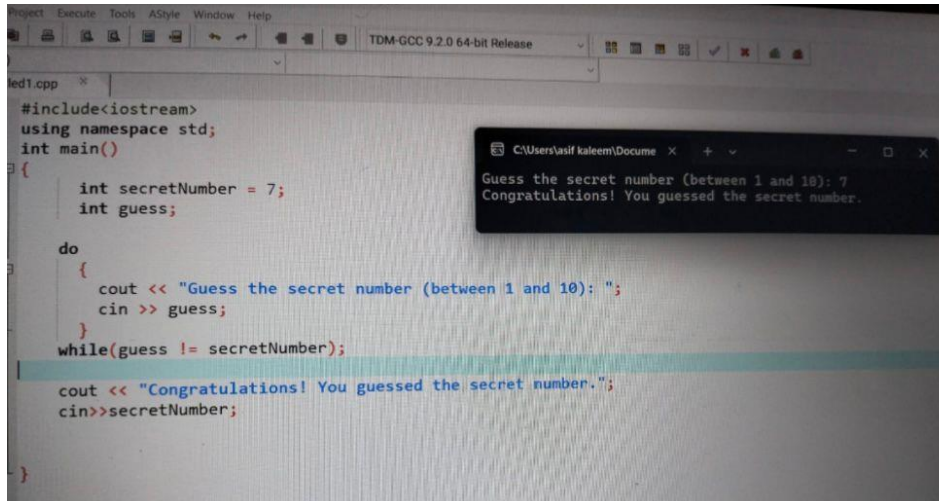
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LAB TASK# 8

QUESTION#1



The screenshot shows a C++ IDE with a file named 'led1.cpp'. The code implements a number guessing game. It includes the `<iostream>` header and uses the `std` namespace. In the `main` function, a secret number (7) is chosen, and the user is prompted to guess. A `do-while` loop ensures the user keeps guessing until they get it right. Once correct, a congratulatory message is displayed, and the secret number is revealed.

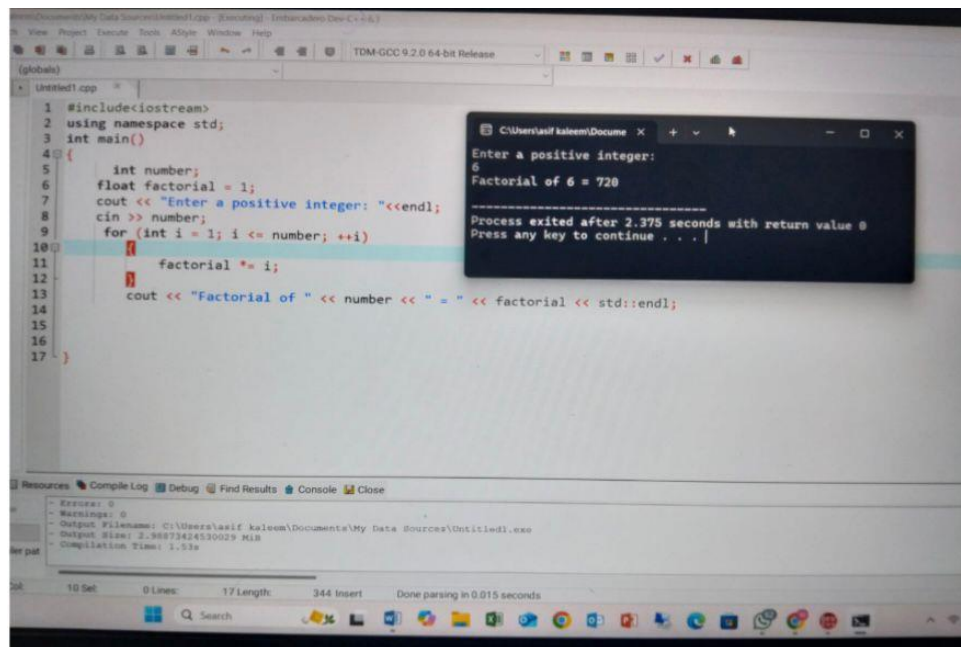
```
#include<iostream>
using namespace std;
int main()
{
    int secretNumber = 7;
    int guess;

    do
    {
        cout << "Guess the secret number (between 1 and 10): ";
        cin >> guess;
    }
    while(guess != secretNumber);

    cout << "Congratulations! You guessed the secret number.";
    cin>>secretNumber;
}
```

The output window shows the program's execution: "Guess the secret number (between 1 and 10): 7" followed by "Congratulations! You guessed the secret number."

QUESTION#2

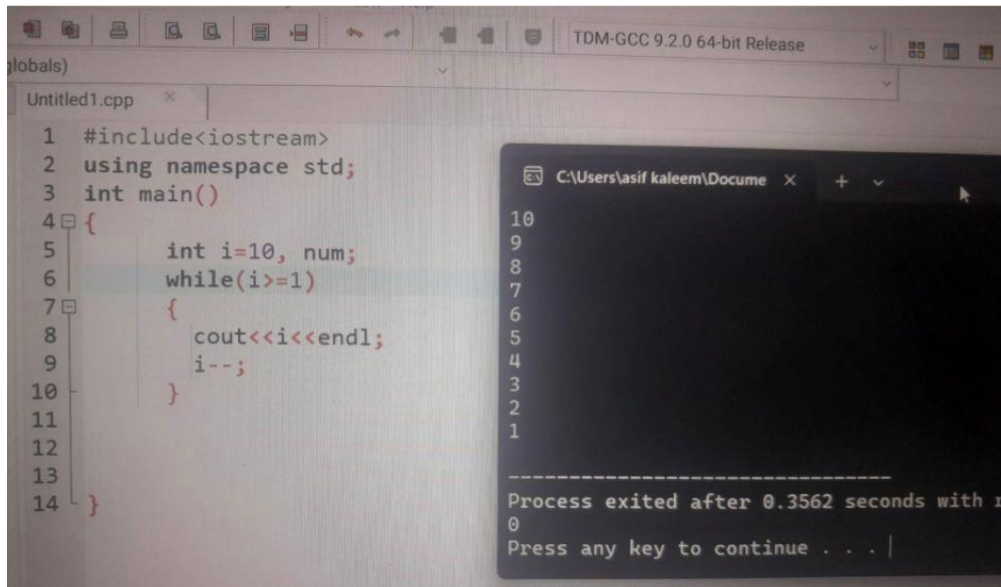


The screenshot shows a C++ IDE with a file named 'Untitled1.cpp'. The code calculates the factorial of a user-provided positive integer. It uses a `for` loop to multiply the numbers from 1 to the input value. The result is then printed.

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int number;
6     float factorial = 1;
7     cout << "Enter a positive integer: "<<endl;
8     cin >> number;
9     for (int i = 1; i <= number; ++i)
10     {
11         factorial *= i;
12     }
13     cout << "Factorial of " << number << " = " << factorial << std::endl;
14
15
16
17 }
```

The output window shows the program's execution: "Enter a positive integer: 6" followed by "Factorial of 6 = 720". It also displays system information: "Process exited after 2.375 seconds with return value 0" and "Press any key to continue . . .".

QUESTION#3

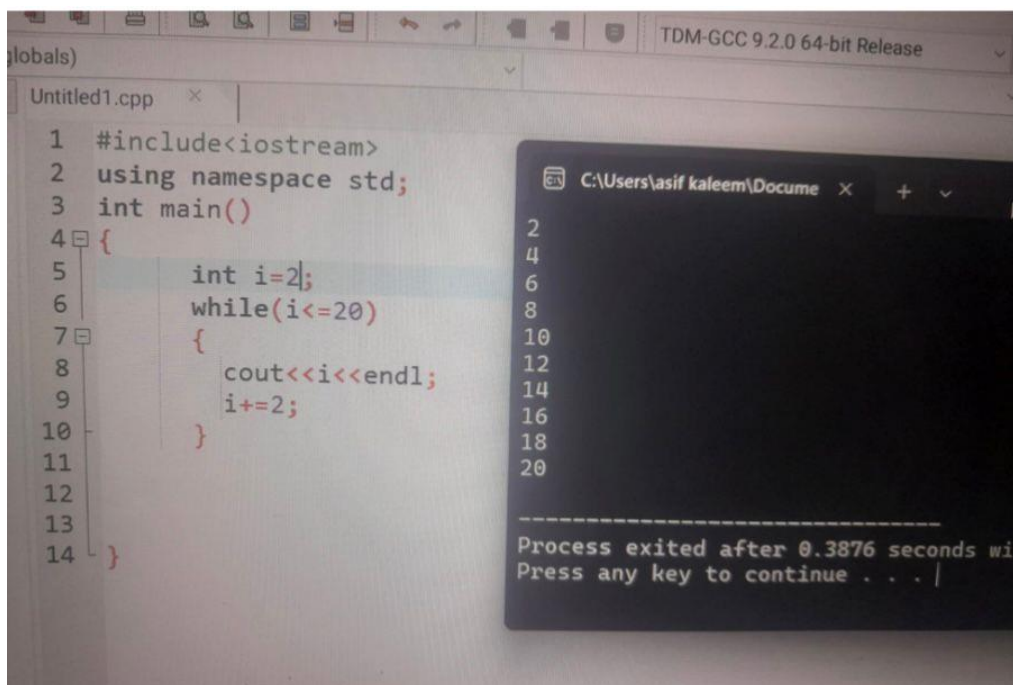


```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int i=10, num;
6     while(i>=1)
7     {
8         cout<<i<<endl;
9         i--;
10    }
11
12
13
14 }
```

10
9
8
7
6
5
4
3
2
1

Process exited after 0.3562 seconds with r
0
Press any key to continue . . . |

QUESTION#4

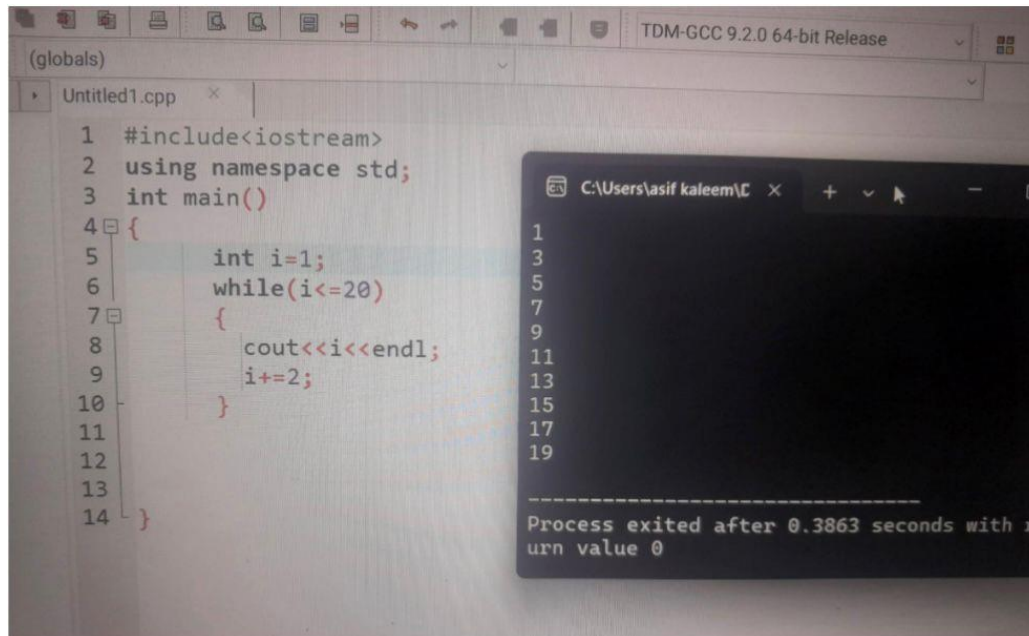


```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int i=2;
6     while(i<=20)
7     {
8         cout<<i<<endl;
9         i+=2;
10    }
11
12
13
14 }
```

2
4
6
8
10
12
14
16
18
20

Process exited after 0.3876 seconds wi
Press any key to continue . . . |

QUESTION#5



The image shows a screenshot of a C++ IDE (TDM-GCC 9.2.0 64-bit Release) with a file named 'Untitled1.cpp'. The code in the editor is as follows:

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int i=1;
6     while(i<=20)
7     {
8         cout<<i<<endl;
9         i+=2;
10    }
11
12
13
14 }
```

Below the code editor, a terminal window is open, displaying the output of the program. The output consists of the odd numbers from 1 to 19, each on a new line:

```
1
3
5
7
9
11
13
15
17
19
```

Below the output, the terminal shows the message: "Process exited after 0.3863 seconds with return value 0".