

LAB MANUAL :1

Course instructor:Dr Talha shahid

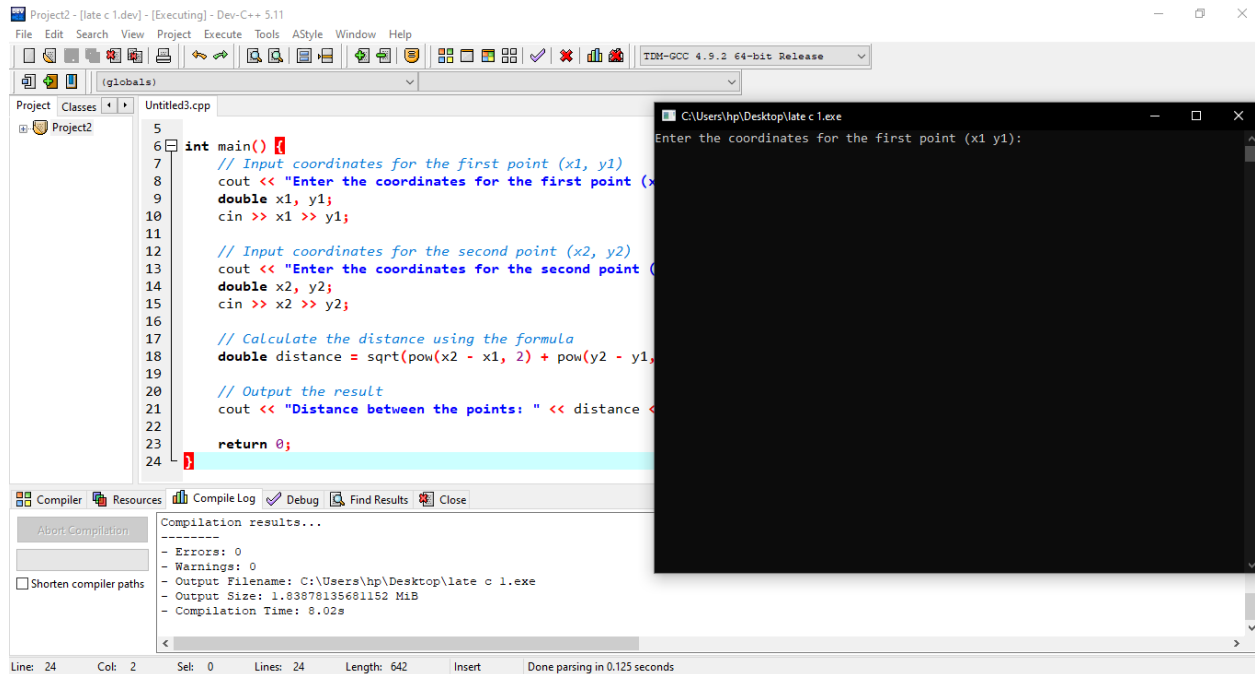
Lab instructor:Muhammmad Affan

Talha Rafique

471701

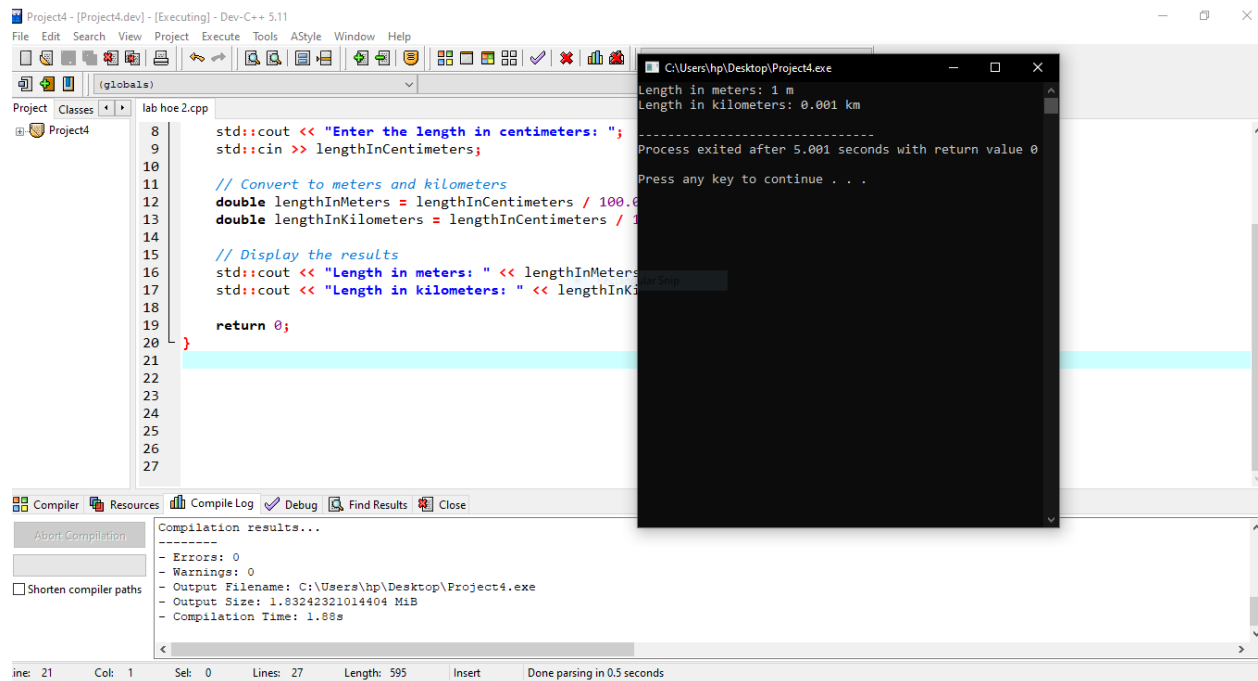
Home task

Question :1



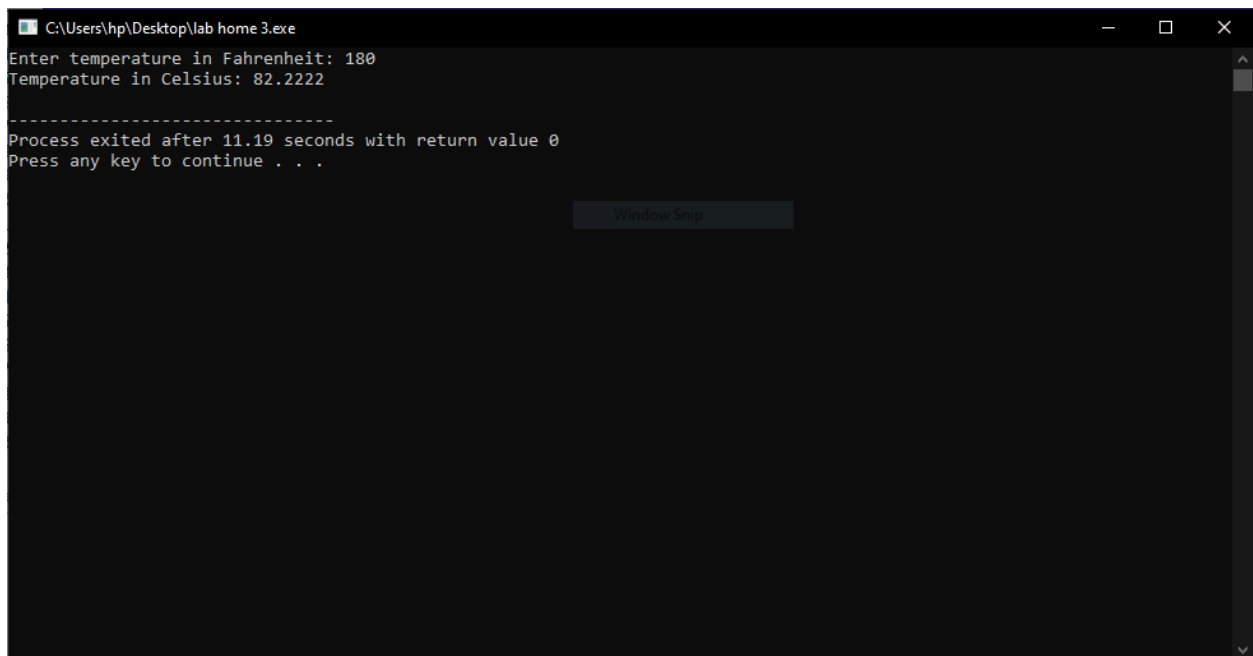
Question 2

Centimeters to meter and kilometer



Question 4

Convert fahrenheit to celsius



LAB MANUAL :2

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Question:1

Eligibility for vote according to age

The screenshot shows a C++ IDE with a project named 'Project7'. The main file is 'lab home 3.cpp'. The code is as follows:

```
1 #include <iostream>
2
3 int main()
4 {
5     // Declare a variable to store age
6     int age;
7
8     // Ask the user to enter age
9     std::cout << "Enter your age: ";
10    std::cin >> age;
11
12    // Check if the user is eligible to vote
13    if (age >= 18)
14    {
15        std::cout << "You are eligible to vote. Go ahead and cast your vote!\n";
16    }
17    else
18    {
19        std::cout << "You are not eligible to vote. Please wait until you are 18 years old.\n";
20    }
21
22    return 0;
23 }
```

The IDE also shows the compilation results in the bottom panel:

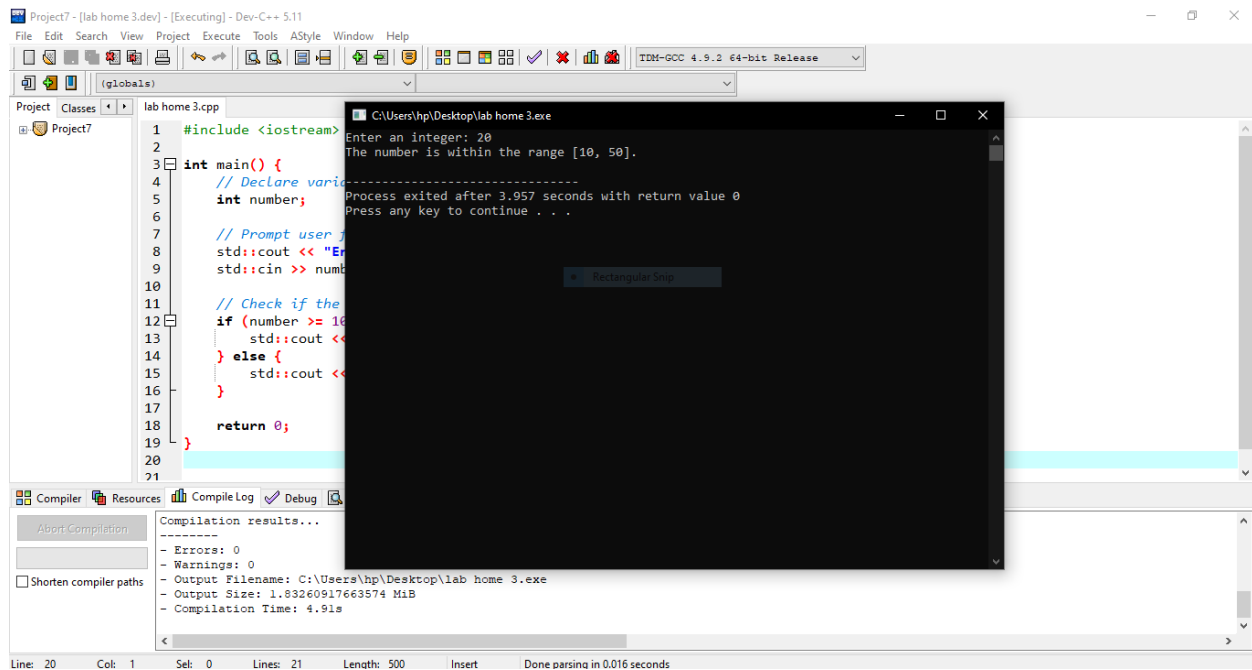
```
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\hp\Desktop\lab home 3.exe
- Output Size: 1.83242321014404 MiB
- Compilation Time: 4.36s
```

The output window shows the execution of the program:

```
C:\Users\hp\Desktop\lab home 3.exe
Enter your age: 18
You are eligible to vote. Go ahead and cast your vote!
Process exited after 4.893 seconds with return value 0
Press any key to continue . . .
```

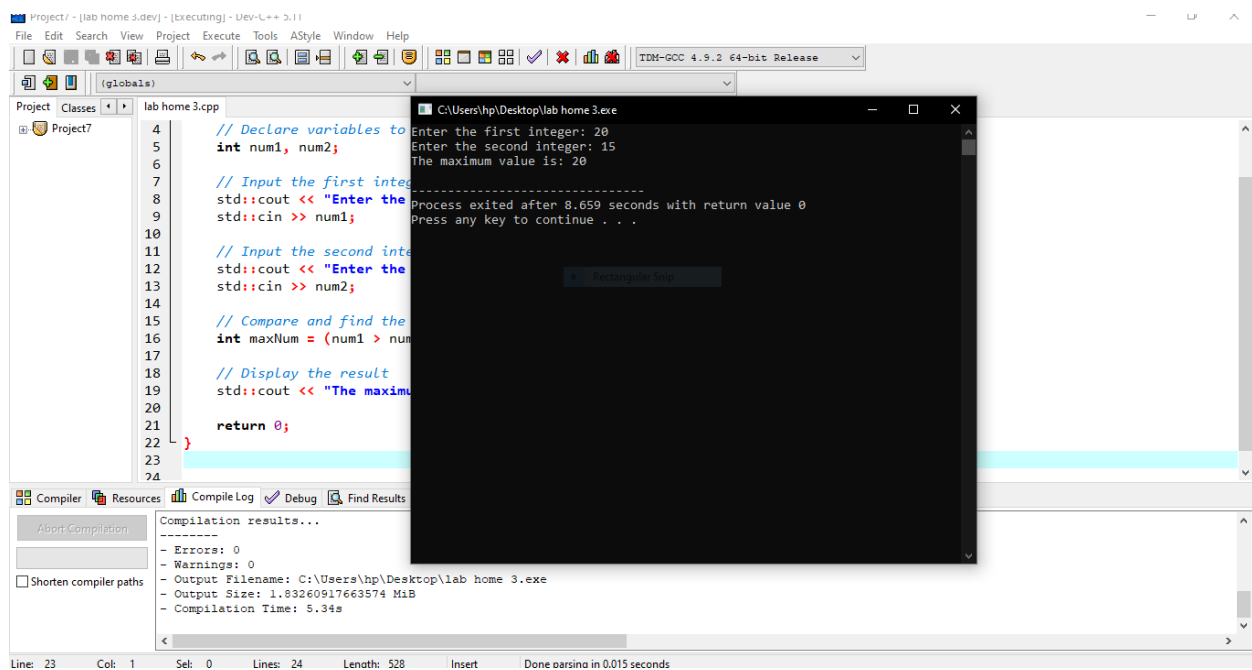
Question:2

To ckeck integer within in a given range



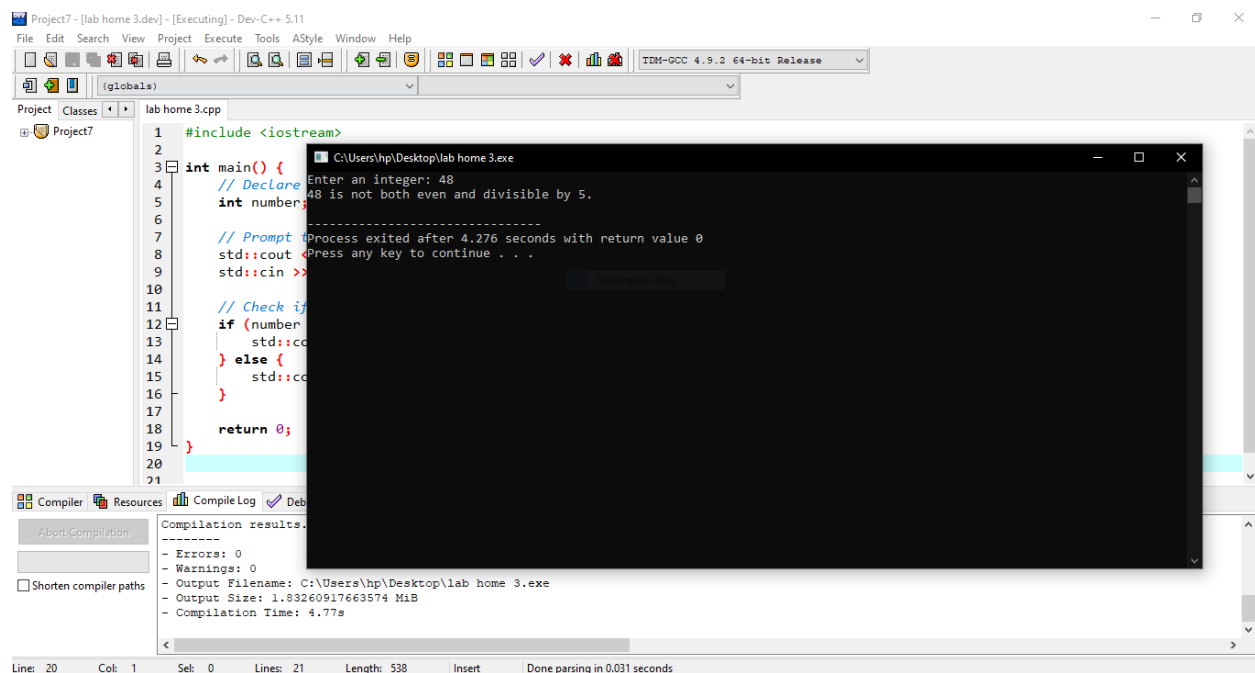
Question:3

Compare two integer and find maximum



HOME TASK

Question: Take integer as input and determine if it is both even and divisible by 5.



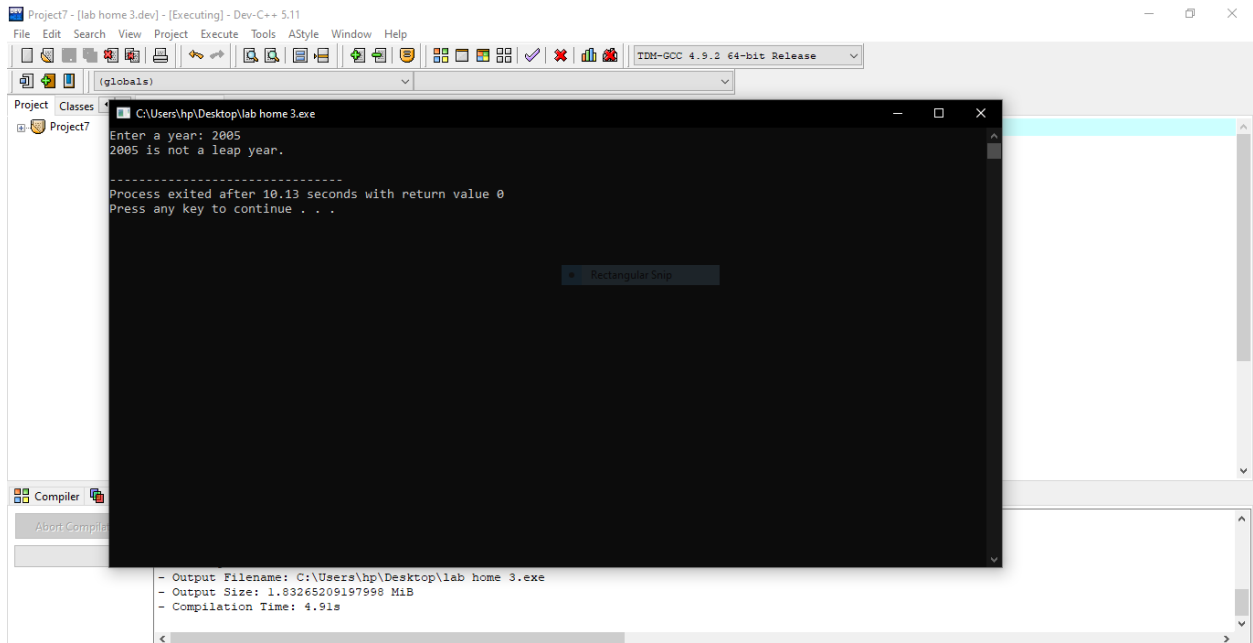
The screenshot shows a C++ IDE with the following components:

- Source Code (lab home 3.cpp):**

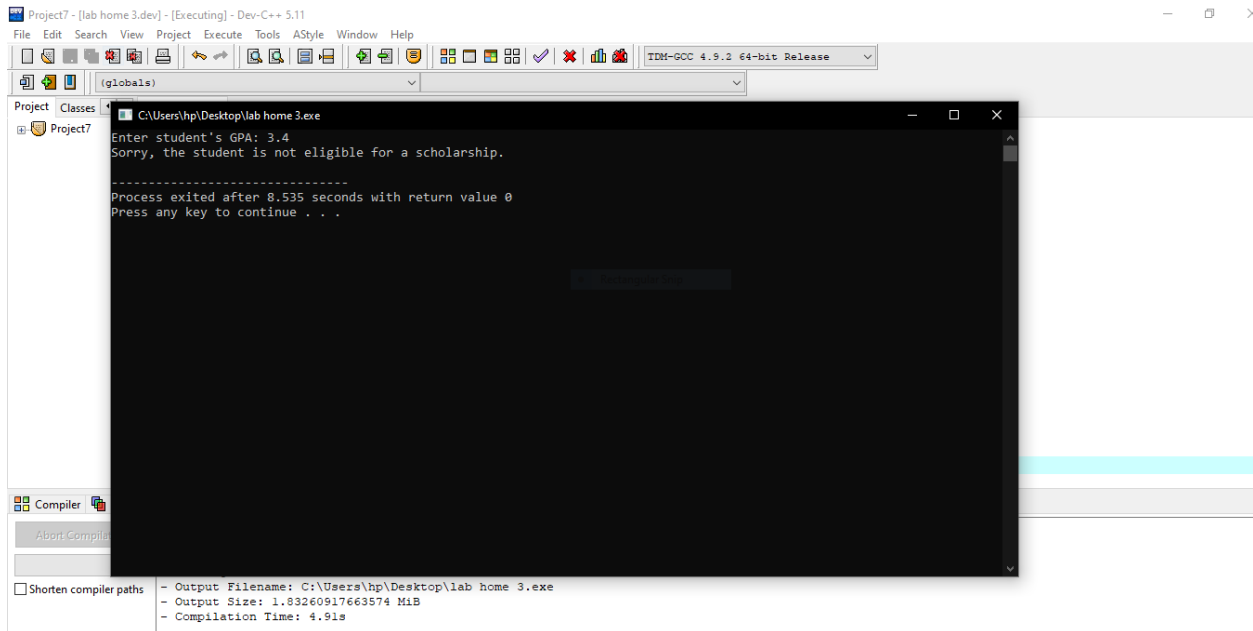
```
1 #include <iostream>
2
3 int main() {
4     // Declare
5     int number;
6
7     // Prompt
8     std::cout << "Enter an integer: ";
9     std::cin >> number;
10
11     // Check if
12     if (number % 2 == 0 && number % 5 == 0) {
13         std::cout << "48 is not both even and divisible by 5." << endl;
14     } else {
15         std::cout << "Process exited after 4.276 seconds with return value 0" << endl;
16     }
17
18     return 0;
19 }
20
21
```
- Compiler Output:**
 - Compilation results: 0 Errors, 0 Warnings.
 - Output Filename: C:\Users\hp\Desktop\lab home 3.exe
 - Output Size: 1.83260917663574 MiB
 - Compilation Time: 4.77s
- Execution Window (C:\Users\hp\Desktop\lab home 3.exe):**

```
Enter an integer: 48
48 is not both even and divisible by 5.
Process exited after 4.276 seconds with return value 0
Press any key to continue . . .
```

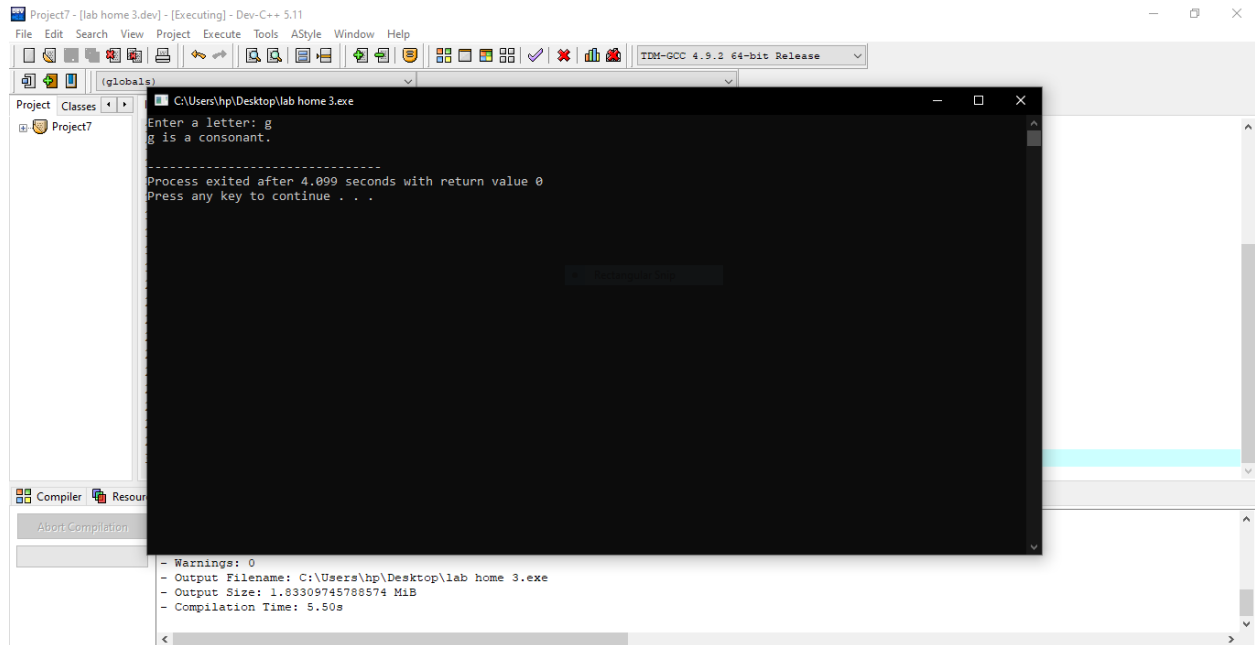
Question: To check leap year.



Question: eligibility for scholarship on basis of gpa and attendance.



Question: To seprate vowels and consonants.



```
Project7 - [lab home 3.dev] - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes
Project7
C:\Users\hpl\Desktop\lab home 3.exe
Enter a letter: g
g is a consonant.
-----
Process exited after 4.099 seconds with return value 0
Press any key to continue . . .
- Warnings: 0
- Output Filename: C:\Users\hpl\Desktop\lab home 3.exe
- Output Size: 1.83309745788574 MiB
- Compilation Time: 5.50s
```