Lab No: 02   Date:

Lab Name: Conditional statement (C program).

Theory:
C has the following conditional statements: Use if to specify a block of code to be executed, if a specified condition is true. Use else to specify a block of code to be executed, if the same condition is false. Use else if to specify a new condition to test, if the first condition is false.

Now to find a year is leap year or not we will follow the formula. The formula is as the year should be divided by 400 as well as 4 but not devisable by 100.

Tools:
1. Hardware: Desktop or Laptop Computer.
2. Software:
   1. Operating System:
      - Windows 10/11
      - Linux
      - MAC
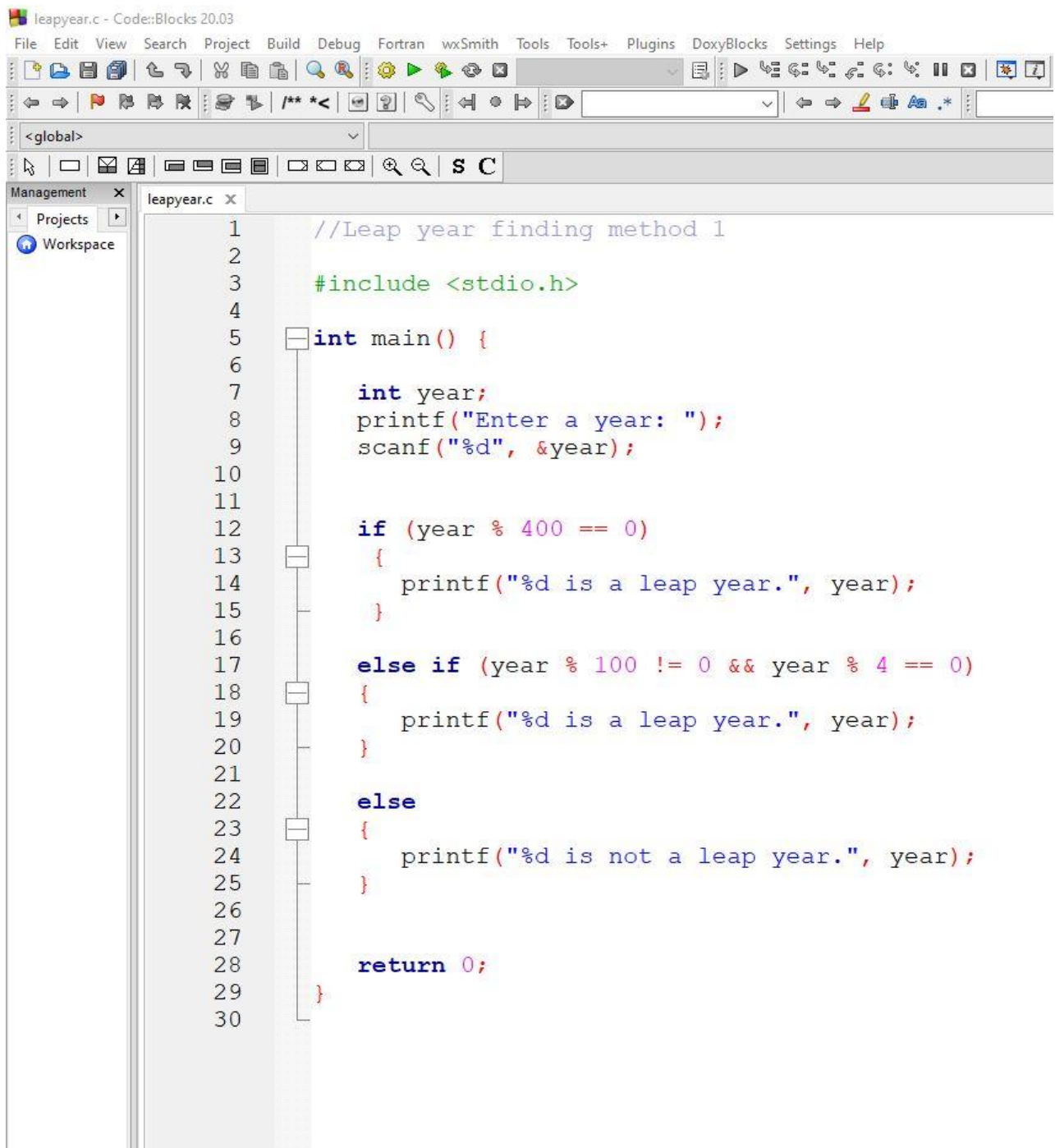   2. Editor:
      - Code Blocks
      - Visual Studio code

Programming Language: C

Uses of Device:
1. Check the electronic connectivity.
2. Switch on the UPS.
3. Press the power button of monitor and CPU.
4. Check all the necessary software. If any software is not installed then install the software.

File Save: File→save file as→type the name→save as type as C/C++ files→click save.

Process:

1. Open any local disk and create a new folder and rename it.
2. Run C program from windows.
3. Select new file from the menu bar.
4. Open the text document file and rename it to lab02
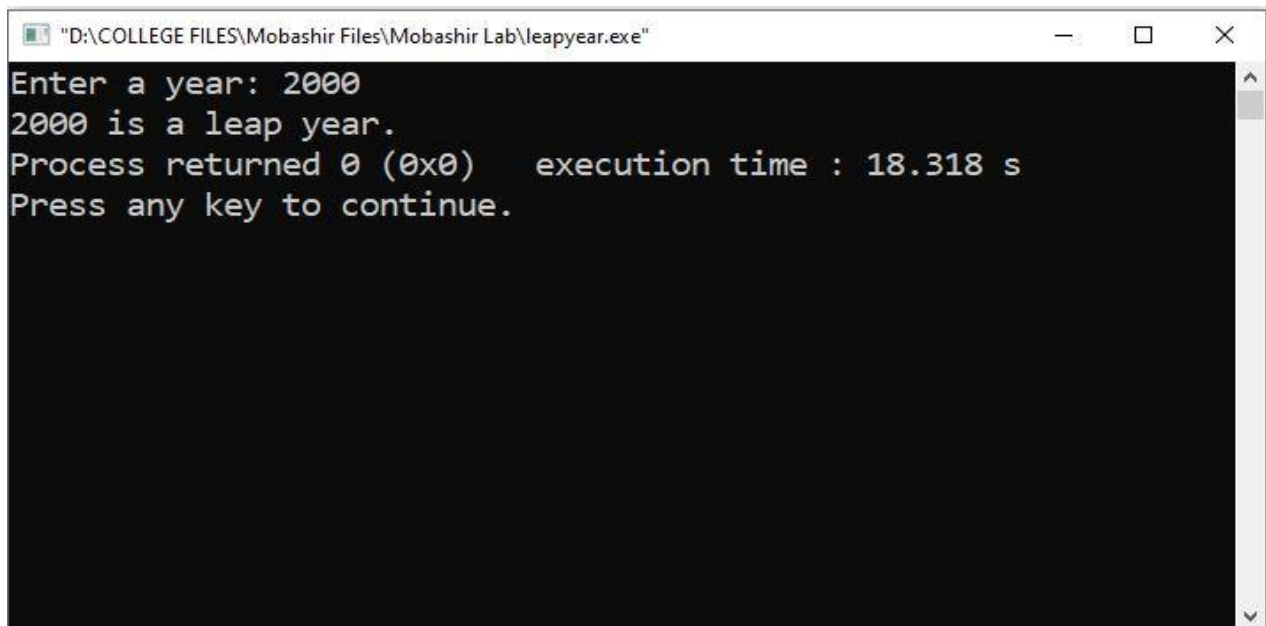5. Then type the following program into lab02.c with code blocks.
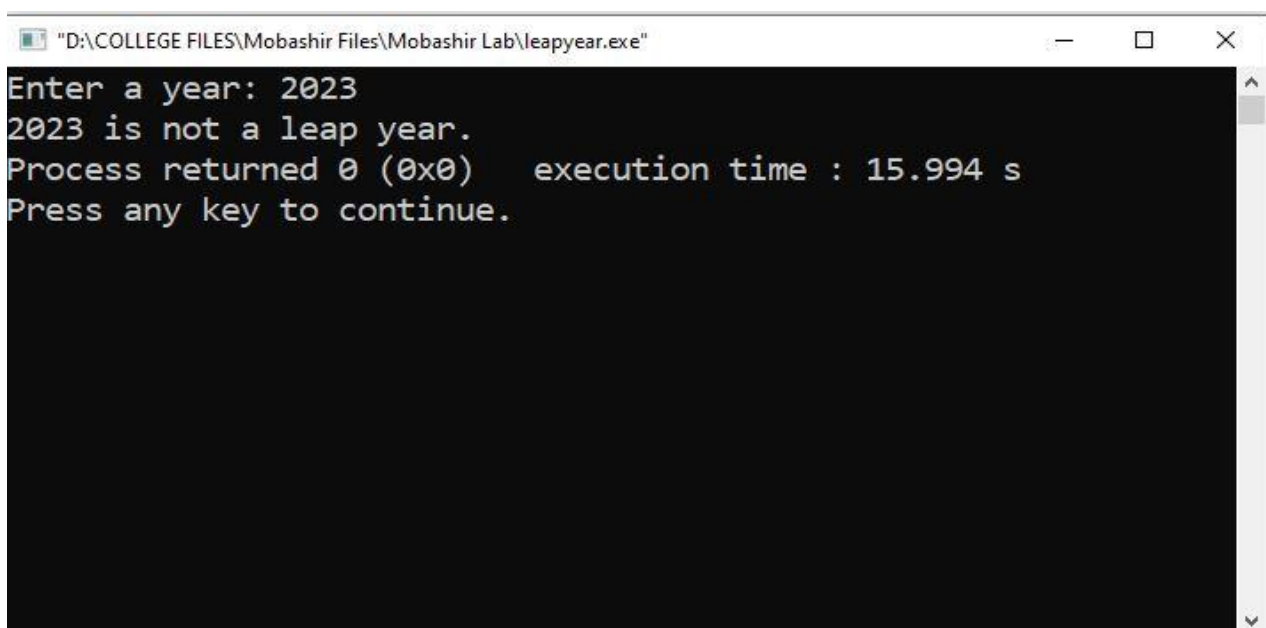
```c
//Leap year finding method 1

#include <stdio.h>

int main() {

    int year;
    printf("Enter a year: ");
    scanf("%d", &year);


    if (year % 400 == 0)
      {
        printf("%d is a leap year.", year);
      }

    else if (year % 100 != 0 && year % 4 == 0)
      {
        printf("%d is a leap year.", year);
      }

    else
      {
        printf("%d is not a leap year.", year);
      }


    return 0;
}
```

Result:

- ➤ Click on build and run to run the program.
- ➤ The following results should be viewed.