

Homework 04

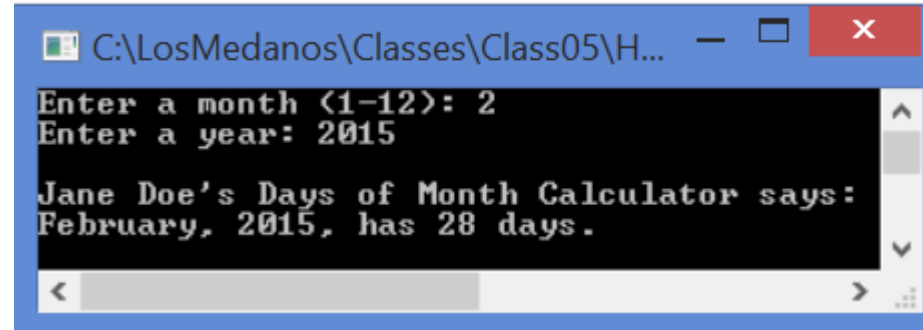
CS-102

Homework 4A

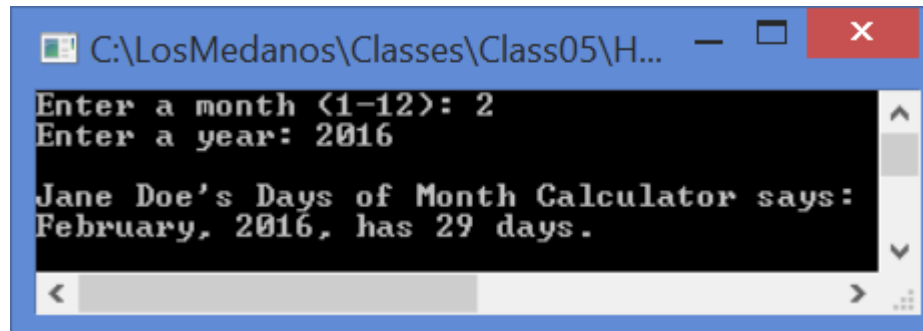
- Write a program that asks the user to enter the month (letting the user enter an integer in the range of 1 through 12) and the year.
 - The program should then display the number of days in that month.
- Use the following criteria to identify leap years.
 - Determine whether the year is divisible by 100. If it is, then it is a leap year if and only if it is divisible by 400. For example, 2000 is a leap year, but 2100 is not.
 - If the year is not divisible by 100, then it is a leap year if and only if it is divisible by 4. For example, 2020 is a leap year, but 2019 is not.
- Be sure to use your name, not “Jane Doe”, in your program.

Homework 4A

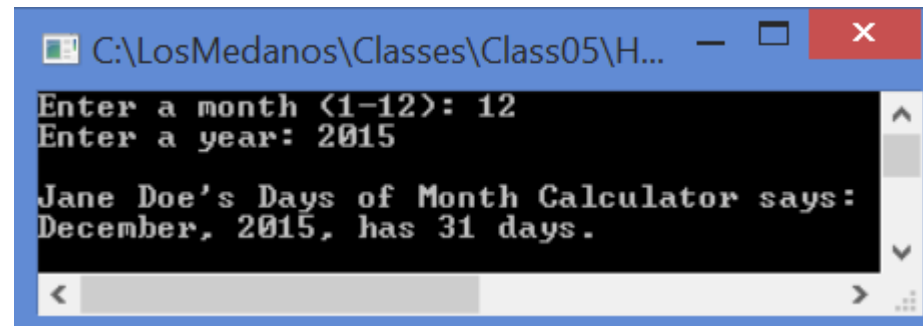
Sample Runs of the Program



```
C:\LosMedanos\Classes\Class05\H...  
Enter a month <1-12>: 2  
Enter a year: 2015  
Jane Doe's Days of Month Calculator says:  
February, 2015, has 28 days.
```



```
C:\LosMedanos\Classes\Class05\H...  
Enter a month <1-12>: 2  
Enter a year: 2016  
Jane Doe's Days of Month Calculator says:  
February, 2016, has 29 days.
```



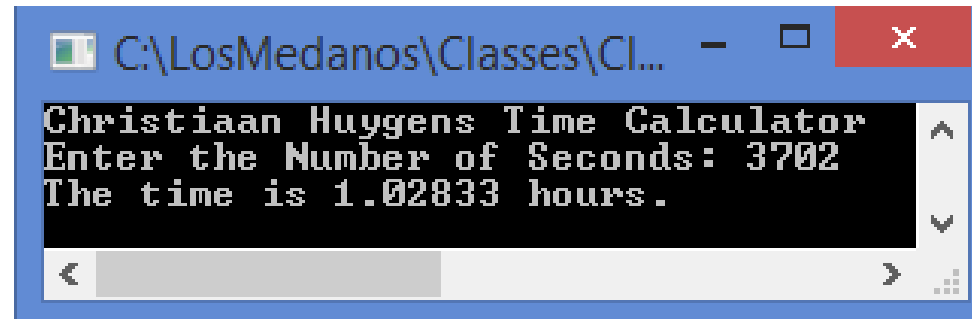
```
C:\LosMedanos\Classes\Class05\H...  
Enter a month <1-12>: 12  
Enter a year: 2015  
Jane Doe's Days of Month Calculator says:  
December, 2015, has 31 days.
```

Homework 4B

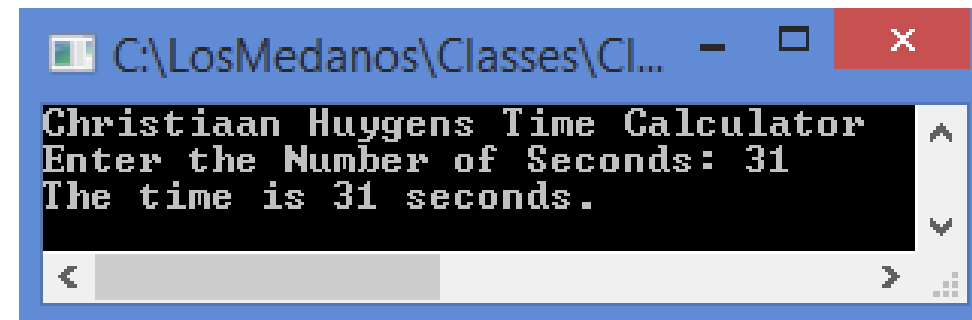
- Write a program that asks the user to enter a number of seconds.
 - If there are less than 60 seconds input, then the program should display the number of seconds that was input.
 - There are 60 seconds in a minute. If the number of seconds entered by the user is greater than or equal to 60, the program should display the number of minutes in that many seconds (note that there may be a fractional # minutes).
 - There are 3,600 seconds in an hour. If the number of seconds entered by the user is greater than or equal to 3,600, the program should display the number of hours in that many seconds (note that there may be a fractional # hours).
 - There are 86,400 seconds in a day. If the number of seconds entered by the user is greater than or equal to 86,400, the program should display the number of days in that many seconds (note – there may be fractional # days).
- Be sure to put your name, rather than Christiaan Huygen's name, on your output display.

Homework 4B

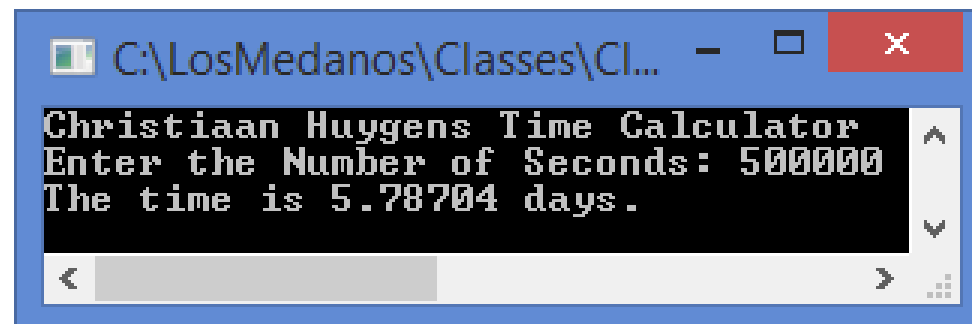
Sample Runs of the Program



```
Christiaan Huygens Time Calculator
Enter the Number of Seconds: 3702
The time is 1.02833 hours.
```



```
Christiaan Huygens Time Calculator
Enter the Number of Seconds: 31
The time is 31 seconds.
```



```
Christiaan Huygens Time Calculator
Enter the Number of Seconds: 500000
The time is 5.78704 days.
```