

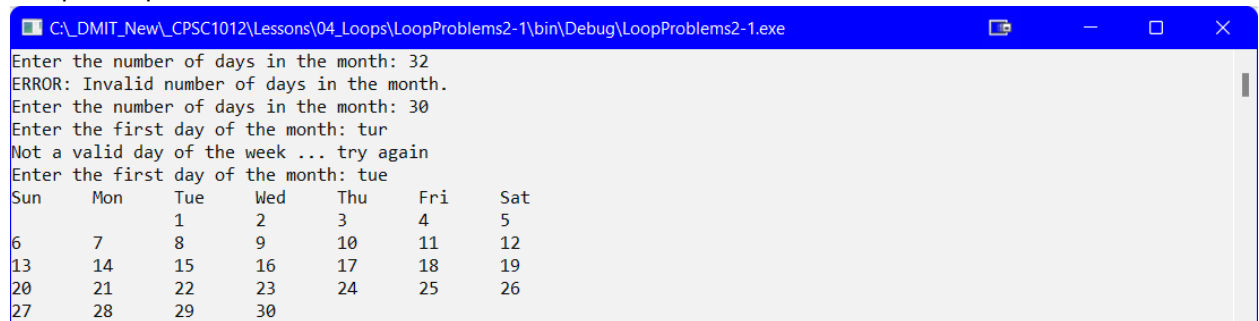
Loop Problems 2

Provide solutions to each of the problems below.

1. Write a program that takes as input the number of days in a month and the day of the week on which the first of the month occurs. The program should produce a display of the calendar for that month in standard form. For example, if there are 30 days in the month and the first day of the month is Wednesday, the input would be 30 and Wed, and the output should be like the following:

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

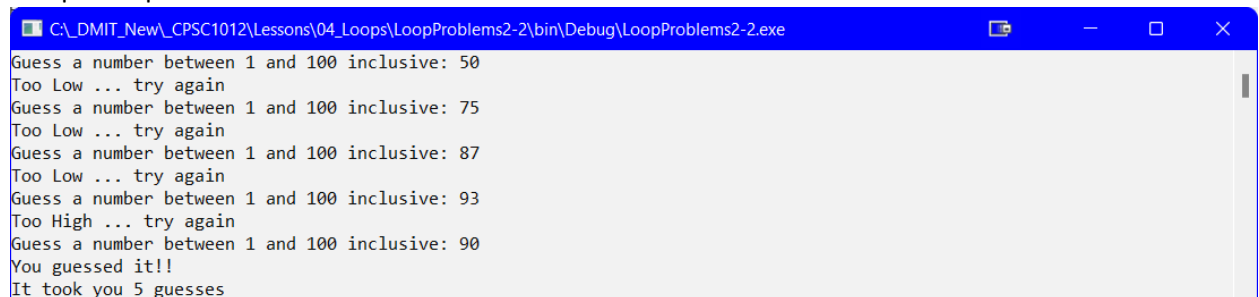
Sample output:



```
C:\DMIT_New\CPSC1012\Lessons\04_Loops\LoopProblems2-1\bin\Debug\LoopProblems2-1.exe
Enter the number of days in the month: 32
ERROR: Invalid number of days in the month.
Enter the number of days in the month: 30
Enter the first day of the month: tur
Not a valid day of the week ... try again
Enter the first day of the month: tue
Sun   Mon   Tue   Wed   Thu   Fri   Sat
6     7     8     9     10    11    12
13    14    15    16    17    18    19
20    21    22    23    24    25    26
27    28    29    30
```

2. Write a program that could be used to play a simple game. The program should first generate a random number between 1 and 100 (research how to create random numbers in your programming language). Once this number has been generated, the program should ask the user to guess the generated number. After each incorrect guess, the program should tell the user whether the guess was too low or too high and ask for another guess. This should continue until the user has found the correct number. The program should then print the number of guesses that the user needed to determine the number.

Sample output:



```
C:\DMIT_New\CPSC1012\Lessons\04_Loops\LoopProblems2-2\bin\Debug\LoopProblems2-2.exe
Guess a number between 1 and 100 inclusive: 50
Too Low ... try again
Guess a number between 1 and 100 inclusive: 75
Too Low ... try again
Guess a number between 1 and 100 inclusive: 87
Too Low ... try again
Guess a number between 1 and 100 inclusive: 93
Too High ... try again
Guess a number between 1 and 100 inclusive: 90
You guessed it!!
It took you 5 guesses
```