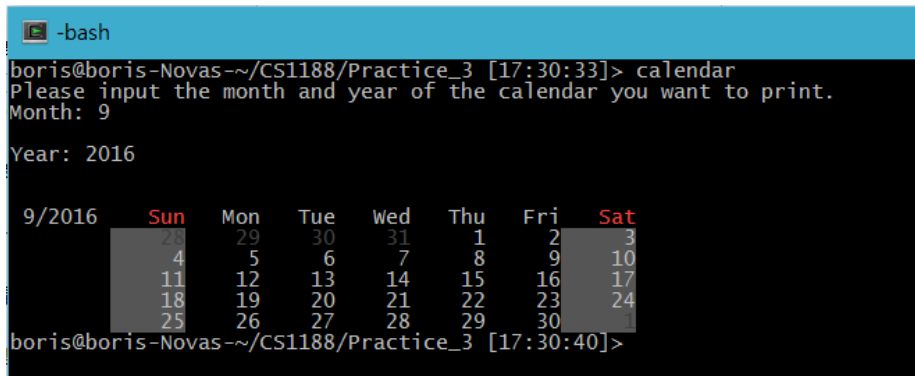


Practice 4 (2016/10/11)

Interactive Puzzle Game

1. Problem 2: ANSI/VT100 Control Sequences in printf

Now you are able to get an input from users and print an output to a monitor. You can design a program to print monthly calendar with user's requested month and year. If the first day of the month is not on Sunday then you have to use the last several days of previous month to fill the empty columns of the first week. If the last day of the month is not on Saturday then you have to use the first several days of next month to fill the empty columns of the last week. Print the days of previous and next month in dark gray. In the first tab period of the first row, print the month and year given by the user. And then print the name from Sunday to Saturday. Print the names of Sunday and Saturday in red color. All days on Saturday and Sunday are printed in blinking. It looks like the following outcome.



```
-bash
boris@boris-Novas-~/CS1188/Practice_3 [17:30:33]> calendar
Please input the month and year of the calendar you want to print.
Month: 9
Year: 2016

9/2016   Sun   Mon   Tue   Wed   Thu   Fri   Sat
         28   29   30   31    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
boris@boris-Novas-~/CS1188/Practice_3 [17:30:40]>
```

2. Bonus

It's the computer's turn. Your computer does not want to simply answer how many As and Bs you get in a game. He or she wants to play a game with you. You design a 3-digit number and computer repeats to guess a 3-digit number. You have to answer how many As and Bs your computer gets. Then your computer will analyze all answers he or she has received from you and make a new guess until a 3A is gotten. A computer puzzle competition will be held three weeks later. The winner of the competition has to accept any new challenge before the end of this semester.

The program flow may look like this:

- Produce a 3-digit random number as my own secret number.
- Produce a 3-digit number for a guess and print my guessing number.
- Ask another player to input his guessing number.
- Print the outcome of the guessing number of another player.
- Receive the outcome of my current guess (input from another player).
- Analyze all previous outcomes and determine the number for next trial. Go

to (b).

3. Further Reading

Calendar time, CPU time, System time (terms in GNU), CPU time, System time (terms in computer organization)