for loop Paul Cao

In this lab, we will practice for loop. The code is due before midnight on 10/19/2010 for CS121A and 10/21/2010 for CS121B.

## Pre-lab activity

Before coming to the lab session, write an algorithm to solve the calendar problem below. Make sure that your algorithms are precise and unambiguous. You don't have to turn in your algorithm

## In-lab activity 2009 Calendar Program

Write a program that outputs the traditional display of a calendar month in the year 2010. The user enters an integer to represent the month to be displayed: 1 for January, 2 for February, 3 for March, and so forth.

## Hints

After receiving input from the user, the program:

- Determines which month is to be displayed.
- Determines the number of days in the selected month.
- Determines the day of the week the month starts on.
- The day of the week may be coded as a number: 1 for Sunday, 2 for Monday and so forth. Recall that January 2010 started on Friday. Writes out a heading that names the month, the year (2010), and the days of the week.
- It then fills in the day numbers in the appropriate columns.
- After displaying the calendar of a month, the user is asked if another month is to be displayed. The program keeps displaying the calendar of a month until the user responds negatively.

## Sample Output

I will display the calendar for the month you choose in 2009.

```
Please input a month (1 for January, 2 for February, and so forth): 1 January 2010
```

```
    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

    31
```

Do you want to continue? y for yes and n for no: y

```
Please input a month (1 for January, 2 for February, and so forth): 2 February 2010
```

```
    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
```

Do you want to continue? y for yes and n for no: y

Please input a month (1 for January, 2 for February, and so forth): 9 September 2010

 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

Do you want to continue? y for yes and n for no: y

Please input a month (1 for January, 2 for February, and so forth): 100 Month input error!

Do you want to continue? y for yes and n for no: y

Please input a month (1 for January, 2 for February, and so forth): 12 December 2010

 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
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 26
 27
 28
 29
 30
 31

Do you want to continue? y for yes and n for no: n

All done. Bye