CECS 174 – Project 2

Switch Statements –

Create a program that prompts the user to input a date and then calculates what day of the week that date falls on. There is a useful formula called Zeller's Rule that can help us.

Given input of month/day/year:

d = day of the month.

m = month (specially numbered: March=3, April=4, …, December = 12, January=13, February=14).

If the month is January or February, subtract one from the year.

D = last two digits of the year.

C = first two digits of the year.

weekDay = d + [((m+1)*26)/10] + D + [D/4] + [C/4] - 2*C

Values in brackets [] mean that they need to be truncated to the next lowest integer.

After the weekDay value has been found we must divide it by 7 and find the remainder. If this value is negative, you must add 7 to it. This final value can be easily tied to the days of the week (0 = Saturday, 1 = Sunday…).

Use switch statements to assign the months and the days to the string variables that will be displayed.

Example 1: 2/17/2011 => d = 17, m = 14, D = 10, C = 20

```
-- Day Calculator --
Please enter a date (MM DD YYYY): 2 17 2011
Your date was Thursday, February 17, 2011
```

Example 2: 3/1/2000 => d = 1, m = 3, D = 0, C = 20

```
-- Day Calculator --
Please enter a date (MM DD YYYY): 3 1 2000
Your date was Wednesday, March 1, 2000
```

Example 3: 1/1/2000 => d = 1, m = 13, D = 99, C = 19

```
-- Day Calculator --
Please enter a date (MM DD YYYY): 1 1 2000
Your date was Saturday, January 1, 2000
```