Pseudocode for a calendar

Pseudocode for the function computeOffset()

ComputeOffSet(Month and Year)

SET numberOfDays = 0

SET numOfYears = Year – 1753

Determine how many days in a year using a FOR Loops

For (First Value of Year; Year needed; Year increment)

Number of Days = number of days + ComputeDaysInRegularYear

For (First Value of Month; Month needed; Month increment)

Number of Days = number of days + ComputeDaysInRegularYear

Return OffSet

End

Determine how many days in one year.

```
int computeOffSet(int month, int year)
{
    int numDays = 0;
    int numOfYears = year - 1753;


    // Determine number of days in year
    for (int yearCount = 1753; yearCount < year; yearCount++)
    {
      numDays += computeDaysInYear(yearCount);
    }
    for (int monthCount = 1; monthCount < month;  monthCount++)
    {
      numDays += computeDaysInMonth(monthCount, year);
    }

    int offset = numDays % 7;
    return offset;
}
```

```
void displayTable(int numDays, int offset)
{
   // display the header for days of the week.
   // cout << "  Su  Mo  Tu  We  Th  Fr  Sa\n";
```

```
   // Determine the day of the week.
   int dayOfWeek = (offset + 1) % 7;

   // Determine what day the month starts.
   for (int i = 0; i <= dayOfWeek; i++)
   {
      cout << "" << setw(4);
   }

   // Display the days of the month.
   for (int dayOfMonth = 1; dayOfMonth <= numDays; dayOfMonth++)
   {
      cout << setw(4) << dayOfMonth;

      dayOfWeek++;

      if (dayOfWeek % 7 == 0)
         cout << endl;
   }

   // End of the month
   if (dayOfWeek % 7 != 0)
      cout << endl;
}
```

void displayTable(int offset, int numDays

Display the top row of the calendar or the days of the month

Prompt the Days (Su, Mo, Tu, We, Th, Fr, Sa, Su); endl;

For (First Value of month; days of the month equal to number of days; days of the month increment)

IF days of the month > 0

Prompt Days of the month

IF days of the month < 7

Prompt a new line

Prompt Days of the week

Days of the week increment.

Display the end of the month