Lab 6, Nikeem Dunkelly-Allen

#include "library.h"

const string months[] = { "DNE", "January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November", "December" };

const int normalyr[] = { 0, 31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31 };

const int leapyr[] = { 0, 31, 29, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31 };

const string days[] = { "Mon", "Tue", "Wed", "Thu", "Fri", "Sat", "Sun" };

int year;

const int leapyr\_check = (year % 100) % 4;

void monthlnth(const int a, const int year){ // a = month integer

//const int leapyr\_check = (year % 100) % 4;

if (leapyr\_check == 0)

cout << year << ", " << months[a] << ", " << leapyr[a];

else

cout << year << ", " << months[a] << ", " << normalyr[a];

}

int normaldayoty(const int month, int i){

const int x = normalyr[i];

if (i == month)

return 0;

else

return x + normaldayoty(month,i+1);

}

int leapdayoty(const int month, int i){

const int x = leapyr[i];

if (i == month)

return 0;

else

return x + leapdayoty(month, i + 1);

}

void dayoty(const int year, const int month, const int day, int i){

const int leapyr\_check = (year % 100) % 4;

if (leapyr\_check == 0)

cout << "That is day number " << leapdayoty(month, i) + day << " in " << year;

else

cout << "That is day number " << normaldayoty(month, i) + day << " in " << year;

}

int normalyrsum(const int normalyr[], int N)

{

if (N <= 0)

return 0;

else

return (normalyrsum(normalyr, N - 1) + normalyr[N - 1]);

}

int leapyrsum(const int leapyr[], int N)

{

if (N <= 0)

return 0;

else

return (leapyrsum(leapyr, N - 1) + leapyr[N - 1]);

}

void dayotc(const int year, const int month, const int day, int i){

int shortened\_year = (year % 100);

const int leapyr\_check = (year % 100) % 4;

if (year >= 2000){

if (leapyr\_check == 0)

cout << "That is day number " << (leapyrsum(leapyr, 13)\*shortened\_year) + leapdayoty(month,i) + day;

else

cout << "That is day number " << (normalyrsum(normalyr, 13)\* shortened\_year) + normaldayoty(month, i) + day;

}

}

void practice(){

//cout << normalyrsum(normalyr, 13);

cout << 1776 % 100;

}

void dayof(const int year, const int month, const int day, int i){

//int fixed = days[(day % 7) +3]

int shortened\_year = (year % 100);

const int leapyr\_check = (year % 100) % 4;

if (year >= 0){

if (((year % 4 == 0) && (year % 100 != 0)) || (year % 400 == 0))

cout << "That is day number " << (leapyrsum(leapyr, 13)\*year/\*\*shortened\_year\*/) + leapdayoty(month, i) + day << ", that day was " << days[(day % 7)];

else

cout << "That is day number " << (normalyrsum(normalyr, 13)\*year/\*\* shortened\_year\*/) + normaldayoty(month, i) + day << ", that day was " << days[(day % 7)] ;

}

}

void calendar(const int year, const int month, int i){

//cout << " " <<months[month] << " " << endl;

int x = i % 7;

if (i <= 30){

cout << i << " ";

calendar(year, month, i + 1);

}

/\*if (x < 7){

cout << " " <<months[month] << " " << endl;

cout << days[x] << " ";

calendar(year, month,i, x + 1);

}\*/

}

int main(){

//monthlnth(2, 2020);

//doty(2000,2,25);

//cout << 2012 % 4;

//practice();

//dayoty(2003,6,6,0);

//dayotc(2003, 6, 6, 0);

//dayof(2001, 10, 4, 0);

//cout << " " <<months[10] << " " << endl;

//calendar(0, 10, 1);

}

* Monthlnth is part 1 of the lab, enter a year and a month and it tells you the length of said month.
* Dayoty (day of the year) is part 2 of the lab, enter a year, month, and day and it tells you the day number of said date.
* Dayotc (day of the century) is part 3 of the lab. It does the same thing as dayoty but it covers the century.
* Dayof (day of forever) tells you the days passed from which ever date you include, also the day of the week.

I could not figure out the rest of the lab, I have the days of the week written but couldn’t get the calendar out. So practically the calendar function is invalid.