#include<iostream.h>

#include<math.h>

using namespace std;

int main ()

{

int year, start\_day, type, n\_days, month(1);

cout << "Enter the year you want the program to display. ";

cin >> year;

if ((year%400==0) || ((year%100==0) ^ (year%4==0)))

{

type = 1;

cout << "\n The year is leap year.";

}

else

{

type = 0;

cout << "\n The year is odd year.";

}

cout << "\n Enter the first day of January: 1 for Sunday, 2 for Monday, etc. ";

cin >> start\_day;

while (start\_day < 0 || start\_day > 12)

{

cout << "\n The number entered is invalid.\n Please enter a number between 1 and 7. ";

cin >> start\_day;

}

while (month <= 12)

{

switch (month)

{

case 1:

cout << "\n\n January\n" << endl;

n\_days = 31;

break;

case 2:

cout << "\n\n February\n" << endl;

if (type = 1)

{

n\_days = 29;

}

else

{

n\_days = 28;

}

break;

case 3:

cout << "\n\n March\n" << endl;

n\_days = 31;

break;

case 4:

cout << "\n\n April\n" << endl;

n\_days = 30;

break;

case 5:

cout << "\n\n May\n" << endl;

n\_days = 31;

break;

case 6:

cout << "\n\n June\n" << endl;

n\_days = 30;

break;

case 7:

cout << "\n\n July\n" << endl;

n\_days = 31;

break;

case 8:

cout << "\n\n August\n" << endl;

n\_days = 31;

break;

case 9:

cout << "\n\n September\n" << endl;

n\_days = 30;

break;

case 10:

cout << "\n\n October" << endl;

n\_days = 31;

break;

case 11:

cout << "\n\n November" << endl;

n\_days = 30;

break;

case 12:

cout << "\n\n December\n" << endl;

n\_days = 31;

break;

default:

;

}

cout << endl << "Sun\tMon\tTue\tWed\tThr\tFri\tSat\n";

for (int i = 1; i < start\_day; i++)

{

cout << " \t";

}

for (int j = 1; j <= n\_days; j++)

{

if (((j + start\_day - 2) % 7 == 0) && (j != 1))

cout << endl;

cout << j << "\t";

}

cout << endl << endl;

month ++;

}

return 0;

}