#include <cstdlib>

#include <iostream>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

using namespace std;

class Calendario

{

public:

int mes, ano;

Calendario ( int b, int c){

mes = b;

ano = c;

}

bool Bissexto(){

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

return true;

else

return false;

}

int DiaDaSemana(int dia, int mes, int ano){

int f = ano + dia + 3 \* (mes - 1) - 1;

if (mes < 3) ano--;

else f -= int(0.4 \* mes + 2.3);

f += int (ano / 4) - int ((ano / 100 + 1) \* 0.75);

f %= 7;

return f+1;

}

void imprimirCalendario(){

cout <<"DOM\tSEG\tTER\tQUA\tQUI\tSEX\tSAB\n\n";

short TamanhoDoMes[12] = {31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31};

if (Bissexto() == true){

TamanhoDoMes[1] = 29;

}

for(int j = 1; j < DiaDaSemana(1, mes, ano); j++) cout <<'\t';

for(int dia = 1; dia <= TamanhoDoMes[mes - 1]; dia++){

if(dia < 10) cout << '0' <<dia <<'\t';

else cout <<dia <<'\t';

if(DiaDaSemana(dia, mes, ano) == 7) cout <<'\n';

}

}

};

int main(int argc, char\*\* argv) {

Calendario obj (2,2020);

obj.imprimirCalendario();

return 0;

}