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月曆查詢

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package com.company;

import java.util.Scanner;

import java.lang.String;

public class Main {

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.print("請輸入西元年：");

int year = input.nextInt();

System.out.print("請輸入月份：");

int month = input.nextInt();

String[] day = {"Sun","Mon","Tue","Wed","Thu","Fri","Sat"};

String[] month\_str = {"Jan","Feb","Mar","Apr","May","Jun","Jul","Aug","Sept","Oct","Nov","Dec"};

System.out.printf("%15s",month\_str[month-1] +'\n');

System.out.println("===========================");//27

for(String i : day){System.out.print(i + " ");}

System.out.print("\n");

int date\_one\_week = week\_day(year,month);

int date = date(year,month);

for(int i=0; i< 1 + (date\_one\_week)\*4; i++){

System.out.print(" ");}

for(int i=1, j = date\_one\_week; i <= date; i++,j++){

if(j % 7 == 0 && i<10 && i > 1)

{System.out.print("\n " + i);}

else if(j % 7 == 0 && i > 1)

{System.out.print("\n" + i);}

else if( i == 1)

{System.out.print(i);}

else if(i >= 10)

{System.out.print(" " + i);}

else

{System.out.print(" " + i);}

}

}

private static int week\_day(int year, int month){

int year\_hundred = (year-(year%100))/100;

int year\_byte = (year%100);

int[] century\_code = {0, 5, 3, 1};

int[] month\_code = {6,2,2,5,0,3,5,1,4,6,2,4};

int four\_years\_time = (year\_byte - (year\_byte%4))/4;

int week\_day;

if((month == 1 || month == 2) && (leap\_year(year))){

week\_day = (month\_code[month-1] + year\_byte + four\_years\_time + century\_code[year\_hundred%4])%7;

}

else

{week\_day = (1 + month\_code[month-1] + year\_byte + four\_years\_time + century\_code[year\_hundred%4])%7;}

return week\_day;

}

private static boolean leap\_year(int year){

if(year % 4 != 0 ){

return false;

}

else if(year % 100 != 0){

return true;

}

else if(year % 100 == 0 && year % 400 !=0){

return false;

}

else{

return true;

}

}

private static int date(int year, int month){

if(month == 2 && leap\_year(year))

{return 29;}

else if(month == 1 || month == 3 || month == 5 || month == 7 || month == 8 || month == 10 || month == 12)

{return 31;}

else if(month == 2)

{return 28;}

else

{return 30;}

}

}