

# Homework #3

(Due date: 12 October 2023)

## Objective :

Learn to use if/else statements to do decision making.

### 3.1

Write a program to input a month and a date, then output the zodiac sign which the date belongs to.

The zodiac table:

Aquarius (January 20 – February 18)  
Pisces (February 19 – March 20)  
Aries (March 21 – April 19)  
Taurus (April 20 – May 20)  
Gemini (May 21 – June 20)  
Cancer (June 21 – July 22)  
Leo (July 23 – August 22)  
Virgo (August 23 – September 22)  
Libra (September 23 – October 22)  
Scorpio (October 23 – November 21)  
Sagittarius (November 22 – December 21)  
Capricorn (December 22 – January 19)

Input:

6, 13

Output :

```
Please enter the month:
6
Please enter the date:
13
06/13 belongs to Gemini.

-----
Process exited after 1.594 seconds with return value 0
請按任意鍵繼續 . . . |
```

## Error Handling:

```
Please enter the month:  
13  
Please enter correct month.  
  
-----  
Process exited after 4.603 seconds with return value 0  
請按任意鍵繼續 . . . |
```

```
Please enter the month:  
12  
Please enter the date:  
32  
Please enter correct date.  
  
-----  
Process exited after 3.796 seconds with return value 0  
請按任意鍵繼續 . . . |
```

### 3.2

Write a program to calculate how much fine David has to pay after checking his violation.

The violation table:

running a red light: \$3600

speeding: \$1200

riding without a license: \$24000

riding without a helmet: \$500

using the cell phone while riding: \$3000

riding in opposite direction: \$1800

Hint:

The ASCII codes of character Y and y are 89 and 121.

The ASCII codes of character N and n are 78 and 110.

Input:

y, y, n, n, y, y

Output :

```
Did David run a red light?
y
Was David speeding?
y
Does David have a driver's license?
n
Was David wearing his helmet?
n
Was David using the cell phone while riding?
y
Was david riding in opposite direction?
y
David has to pay $34100.

-----
Process exited after 6.819 seconds with return value 0
請按任意鍵繼續 . . . |
```

**Please note:: users of visual studio add the following code to your program's beginning**

```
2  #pragma warning(disable:4996)
```

繳交格式及規定：

程式重點地方請加註解,給分也會酌量參考註解。

請繳交 .c 檔即可。

c 檔的檔名一律統一,以學號為檔名壓縮成一個以學號為名的壓縮檔  
上傳,

上傳請一律繳交壓縮檔。

Example:

若學號為 B123456789, 則.c/.cpp 檔名為 B123456789.c ,

而壓縮檔名為 B123456789.rar 。

繳交期限 2023.10.12 (四) 09:00 分之前,逾期一律不收,

無輸入輸出及逾期者一律以 0 分計算。

1. 點選要繳交的作業,選擇「進行作業」。

