Exercise 4

Download the files from http://www.Peter-Lo.com/Teaching/AMA-Excel/Source4.zip, you will use these files to finish the following exercises.

1. Open the Excel file "Question 4-1.xlsx". This spreadsheet contains the cost per gallon for olive oil. You are required to develop a formula for total cost calculation using function IF according to the provided logic.

Olive Oil	Cost/Gallon
Cost/gallon for the first 500 gallons:	$23
Cost/gallon for gallons above 500:	$20
Number of Gallons:	501
Total Cost:	11520

2. Open the Excel file "Question 4-2.xlsx". Create a nested **IF** formula to calculate the final salary for each footballer:
    *   If the footballer receives more than 30 yellow cards, then the fine is 10% of his salary
    *   If the footballer receives 10 - 30 yellow cards, then the fine is 2% of his salary
    *   If the footballer receives less than 10 yellow cards, no penalty will be taken.

Footballer	Salary	Yellow Cards	Red Cards	Final Salary
Wayne Rooney	85,000	8	0	85,000
Robin van Persie	87,500	4	0	87,500
Lionel Messi	92,300	18	2	90,454
Cristiano Ronaldo	98,600	25	6	96,628
Fernando Torres	74,500	7	0	74,500
Gareth Bale	38,000	3	0	38,000
David Silva	46,400	5	1	46,400
Frank Lampard	64,500	14	2	63,210
Carlos Tevez	78,300	58	19	70,470
Didier Drogba	66,350	12	2	65,023

3. Open the Excel file "Question 4-3.xlsx". By using **AND** function, check whether the input value (Column C) is between minimum value (Column A) and Maximum value (Column B).

	A	B	C	D
1	**Minimum Value**	**Maximum Value**	**Input Value**	**Within Range?**
2	10	14	50	FALSE
3	32	45	38	TRUE
4	12	44	85	FALSE
5	43	98	54	TRUE
6				

4. Open the Excel file "Question 4-4.xlsx", calculate the total turnover for each province.

Province	Turnover
Guangdong	411,500
Fujian	525,900
Hubei	234,000

5. Open the Excel file "Question 4-5.xlsx". This spreadsheet contains a list of furniture items.

  A) Create a drop-down menu in the green cell that allows user select the product code.

Wise Owl Furnishings			
Code	**Item**	**Price**	**In Stock**
K16	Stool	£21.00	7
A17	Lamp	£32.99	8
A18	Bookcase	£112.50	40
A34	Armchair	£89.99	5
C39	Sofa	£312.00	80
D80	Dining Table	£199.99	12
F26	Shelves	£45.00	9
B45	Kitchen	£231.00	34
G36	Rocking Chair	£87.99	13

Enquiry System	
Code:	C39
It	A17
Pr	A18
	A34
Number in Sto	C39
	D80
	F26
	B45
	G36

  B) Enter formulae in the yellow cells so that whenever you enter a product code in the green cell you see the product details beneath.

Wise Owl Furnishings			
Code	**Item**	**Price**	**In Stock**
K16	Stool	£21.00	7
A17	Lamp	£32.99	8
A18	Bookcase	£112.50	40
A34	Armchair	£89.99	5
C39	Sofa	£312.00	80
D80	Dining Table	£199.99	12
F26	Shelves	£45.00	9
B45	Kitchen	£231.00	34
G36	Rocking Chair	£87.99	13

Enquiry System	
Code:	C39
Item:	Sofa
Price:	£312.00
Number in Stock:	80

6. Open the Excel file "Question 4-6.xlsx". Enter a formula in the yellow cell so that it shows the corresponding name for input student ID in the green cell. Prompt for message "**Not in this class**" if the student ID not found.

ID	Name
96200745	David Cheung
96114424	Patrick Pang
96101242	Simon Lee
96484247	May Leung
96012149	Paul Chan
96427732	Chris Wong
ID:	96114424
Name:	Patrick Pang

ID	Name
96200745	David Cheung
96114424	Patrick Pang
96101242	Simon Lee
96484247	May Leung
96012149	Paul Chan
96427732	Chris Wong
ID:	1234
Name:	Not in this class

7. Open the Excel file "Question 4-7.xlsx" which contain the time record for a marathon competition.

A) Calculate the total time need for each runner.

Name	Sex	Start Time	Complete Time	Total Time
Amy	F	9:00:00	11:39:04	2 hr 39 min 04 sec
David	M	9:00:10	11:45:54	2 hr 45 min 44 sec
James	M	9:01:42	11:55:34	2 hr 53 min 52 sec
June	F	9:00:00	11:52:50	2 hr 52 min 50 sec
Ken	M	9:00:48	11:35:24	2 hr 34 min 36 sec
Mary	F	9:03:00	11:42:08	2 hr 39 min 08 sec
Paul	M	9:00:36	11:58:54	2 hr 58 min 18 sec
Sam	M	9:02:00	11:38:42	2 hr 36 min 42 sec
Susan	F	9:01:00	11:44:41	2 hr 43 min 41 sec
Yuki	F	9:02:00	11:50:08	2 hr 48 min 08 sec

B) Find out the champion, first runner-up, and second runner-up for the competition.

	Name	Sex	Time
Champion:	Ken	M	2 hr 34 min 36 sec
First Runner-up:	Sam	M	2 hr 36 min 42 sec
Second Runner-up:	Amy	F	2 hr 39 min 04 sec

8. Open the Excel file "Question 4-8.xlsx", find the maximum score for each region.

	A	B	C	D	E
1	**Region**	**Score**		**Region**	**Highest Score**
2	North	75%		North	75%
3	South	85%		South	85%
4	East	65%		East	95%
5	West	55%		West	55%
6	North	70%			
7	South	80%			
8	East	90%			
9	West	50%			
10	North	60%			
11	South	85%			
12	East	95%			
13	West	45%			