

Name: _____ Section 09

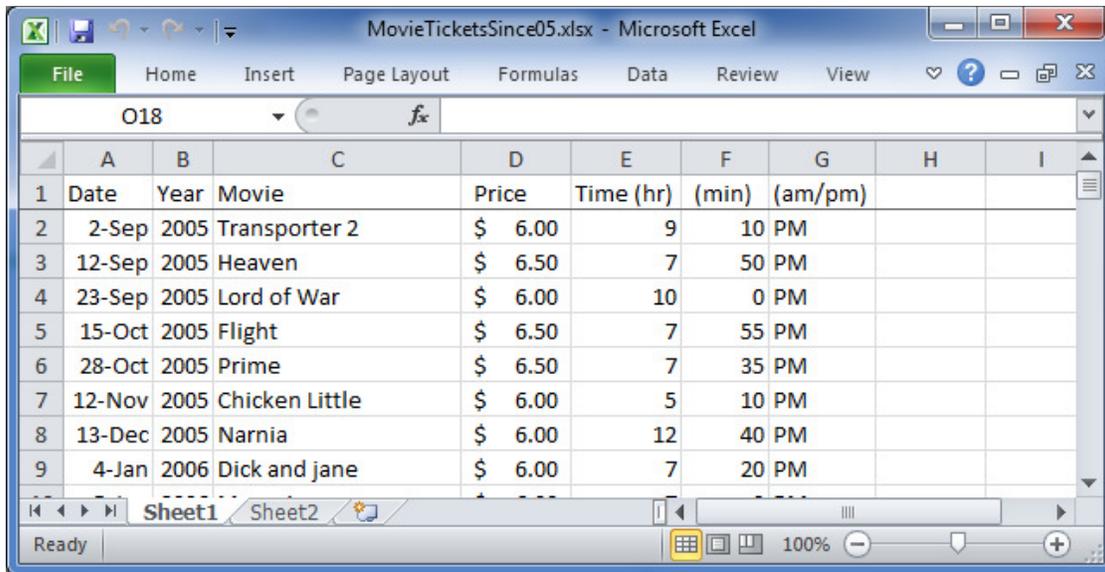
Exam3

_____/30pts (30min) 30 Multiple Choice Questions

_____/25pts (30min + 15min overtime) Coding

This is a 2-part exam. Today, you write 1 programmer defined function to load the data and filter what will be used next time. At the end of the class time today, submit ONLY the function file. DO NOT submit a main, nor an excel sheet.

The data file is a database of movies I've seen since 2005.



The screenshot shows a Microsoft Excel spreadsheet titled "MovieTicketsSince05.xlsx". The spreadsheet has columns labeled A through I. The data is as follows:

	A	B	C	D	E	F	G	H	I
1	Date	Year	Movie	Price	Time (hr)	(min)	(am/pm)		
2	2-Sep	2005	Transporter 2	\$ 6.00	9	10	PM		
3	12-Sep	2005	Heaven	\$ 6.50	7	50	PM		
4	23-Sep	2005	Lord of War	\$ 6.00	10	0	PM		
5	15-Oct	2005	Flight	\$ 6.50	7	55	PM		
6	28-Oct	2005	Prime	\$ 6.50	7	35	PM		
7	12-Nov	2005	Chicken Little	\$ 6.00	5	10	PM		
8	13-Dec	2005	Narnia	\$ 6.00	12	40	PM		
9	4-Jan	2006	Dick and jane	\$ 6.00	7	20	PM		

All sections will have the SAME topic. DO NOT SHARE, TALK, EMAIL anything related to this exam.

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The requirements for the programmer defined function are:

- (2pts) It has 1 parameter: the filename of an excel sheet of movies
- (2pts) It returns 3 variables:
 - a 2D numerical matrix. Column1 has the *year*, and column2 has the *price*.
 - 1 numerical vector, which has all the *Time(hr)* only. Do no worry about the minutes.
 - 1 cell-array, which has the AM/PM column. It should no longer have the (am/pm) label at top though.

The function should load the data file (3pts), extract and return the numerical matrix (3pts), the numerical vector (2pts), and the cell-array (3pts) properly. The function should have proper documentation/author information (3pts), comments and proper spacing (3pts).

You are not to provide me with a main code (it will not count for any credit). However, please provide how the function would be called to load this particular excel sheet. Place that as a comment at the bottom of the function file, omit the semi-colon (2pts).

Anything not mentioned in the requirement is for you to choose. (2pts)

Get started for Thursday:

As I've mentioned in class, be smart! You have 4 days to practically figure out/practice a LOT/anticipate part2.

Go ahead and create the main code already! Call the function you just created. (Fix it if there were still flaws). Then, randomly come up with things to solve! You may come up on your own with pieces of part2. That's ok!