Monmouth COLLEGE

- Name: _____
- Date: _____
- Section: _____

BUSI 201: Business Data Analysis

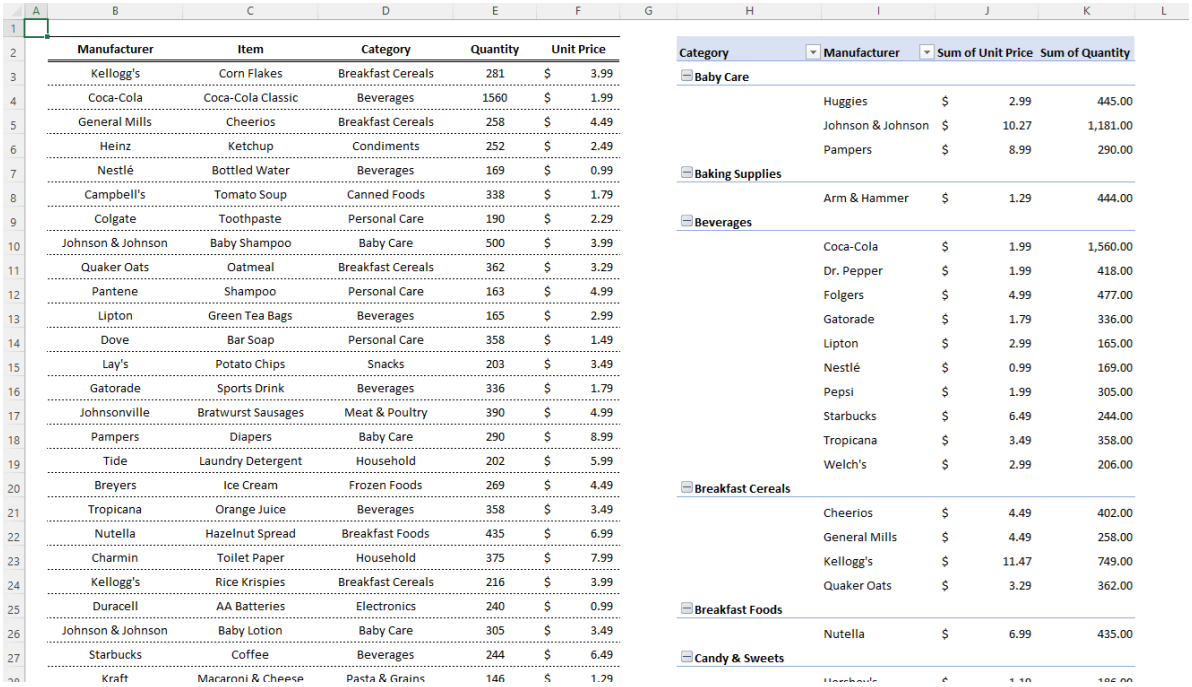
Quiz #4: PivotTables and PivotCharts

INSTRUCTIONS:

- `BUSI201-Q04-Workbook.xlsx` is the companion workbook for this quiz.
- The workbook consists of 6 worksheets: `PIVOT-01` to `PIVOT-06`
- The quiz booklet contains 6 problems, each corresponding to one worksheet.
- Once you are finished, save/rename the workbook to `YOUR_LOGIN_ID.xlsx`, and submit your results via email to `BPARK@monmouthcollege.edu`.
- Double-check your submission email for your attached file, file name, and receiver's email address, as you will not be permitted to submit or update your solutions past the in-class deadline.

Problem #1. PivotTable: 15 Points

Navigate to worksheet `PIVOT-01`. Without editing the original data provided to you in the worksheet, insert and edit a PivotTable that matches the following figure exactly. The list below the figure is a rough guideline of items that you should pay particular attention towards, but may not be a complete list.



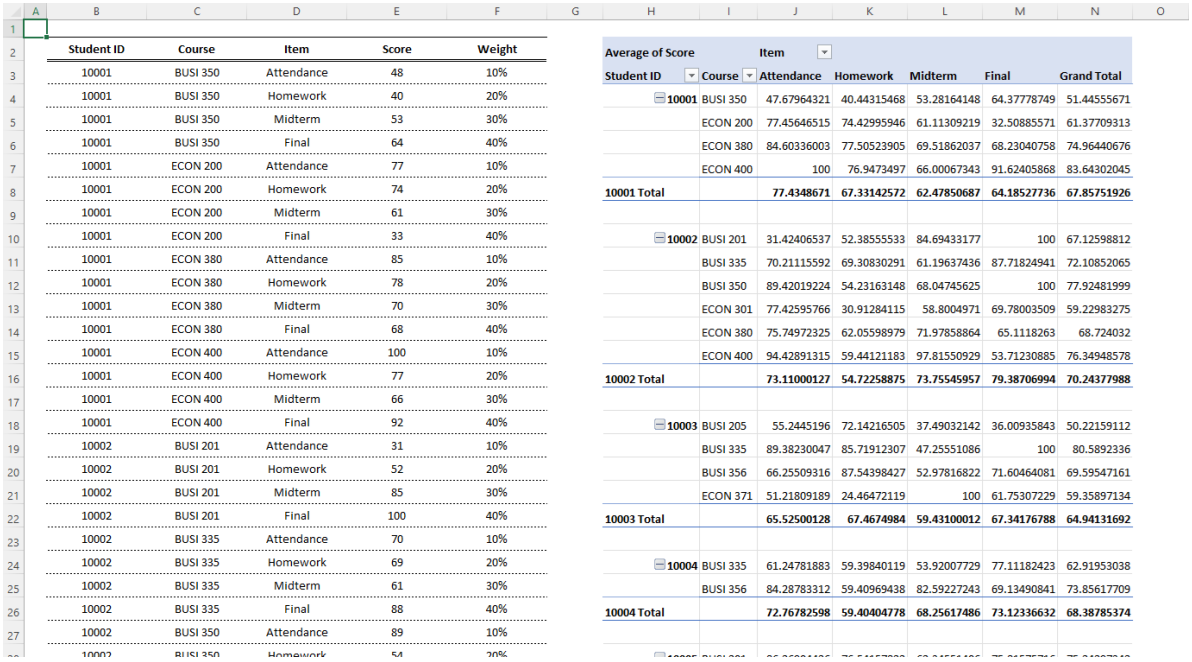
Manufacturer	Item	Category	Quantity	Unit Price
Kellogg's	Corn Flakes	Breakfast Cereals	281	$ 3.99
Coca-Cola	Coca-Cola Classic	Beverages	1560	$ 1.99
General Mills	Cheerios	Breakfast Cereals	258	$ 4.49
Heinz	Ketchup	Condiments	252	$ 2.49
Nestlé	Bottled Water	Beverages	169	$ 0.99
Campbell's	Tomato Soup	Canned Foods	338	$ 1.79
Colgate	Toothpaste	Personal Care	190	$ 2.29
Johnson & Johnson	Baby Shampoo	Baby Care	500	$ 3.99
Quaker Oats	Oatmeal	Breakfast Cereals	362	$ 3.29
Pantene	Shampoo	Personal Care	163	$ 4.99
Lipton	Green Tea Bags	Beverages	165	$ 2.99
Dove	Bar Soap	Personal Care	358	$ 1.49
Lay's	Potato Chips	Snacks	203	$ 3.49
Gatorade	Sports Drink	Beverages	336	$ 1.79
Johnsonville	Bratwurst Sausages	Meat & Poultry	390	$ 4.99
Pampers	Diapers	Baby Care	290	$ 8.99
Tide	Laundry Detergent	Household	202	$ 5.99
Breyers	Ice Cream	Frozen Foods	269	$ 4.49
Tropicana	Orange Juice	Beverages	358	$ 3.49
Nutella	Hazelnut Spread	Breakfast Foods	435	$ 6.99
Charmin	Toilet Paper	Household	375	$ 7.99
Kellogg's	Rice Krispies	Breakfast Cereals	216	$ 3.99
Duracell	AA Batteries	Electronics	240	$ 0.99
Johnson & Johnson	Baby Lotion	Baby Care	305	$ 3.49
Starbucks	Coffee	Beverages	244	$ 6.49
Kraft	Macaroni & Cheese	Pasta & Grains	146	$ 1.29

Category	Manufacturer	Sum of Unit Price	Sum of Quantity
Baby Care			
	Huggies	$ 2.99	445.00
	Johnson & Johnson	$ 10.27	1,181.00
	Pampers	$ 8.99	290.00
Baking Supplies			
	Arm & Hammer	$ 1.29	444.00
Beverages			
	Coca-Cola	$ 1.99	1,560.00
	Dr. Pepper	$ 1.99	418.00
	Folgers	$ 4.99	477.00
	Gatorade	$ 1.79	336.00
	Lipton	$ 2.99	165.00
	Nestlé	$ 0.99	169.00
	Pepsi	$ 1.99	305.00
	Starbucks	$ 6.49	244.00
	Tropicana	$ 3.49	358.00
	Welch's	$ 2.99	206.00
Breakfast Cereals			
	Cheerios	$ 4.49	402.00
	General Mills	$ 4.49	258.00
	Kellogg's	$ 11.47	749.00
	Quaker Oats	$ 3.29	362.00
Breakfast Foods			
	Nutella	$ 6.99	435.00
Candy & Sweets			

- Consider the order of variables in the row field.
- Consider the Value Field Settings of the value field.
- Consider the formatting of the numbers in the value field.
- Consider the Grand Totals.
- Consider the Report Layout.

Problem #2. PivotTable: 15 Points

Navigate to worksheet `PIVOT-02`. Without editing the original data provided to you in the worksheet, insert and edit a PivotTable that matches the following figure exactly. The list below the figure is a rough guideline of items that you should pay particular attention towards, but may not be a complete list.



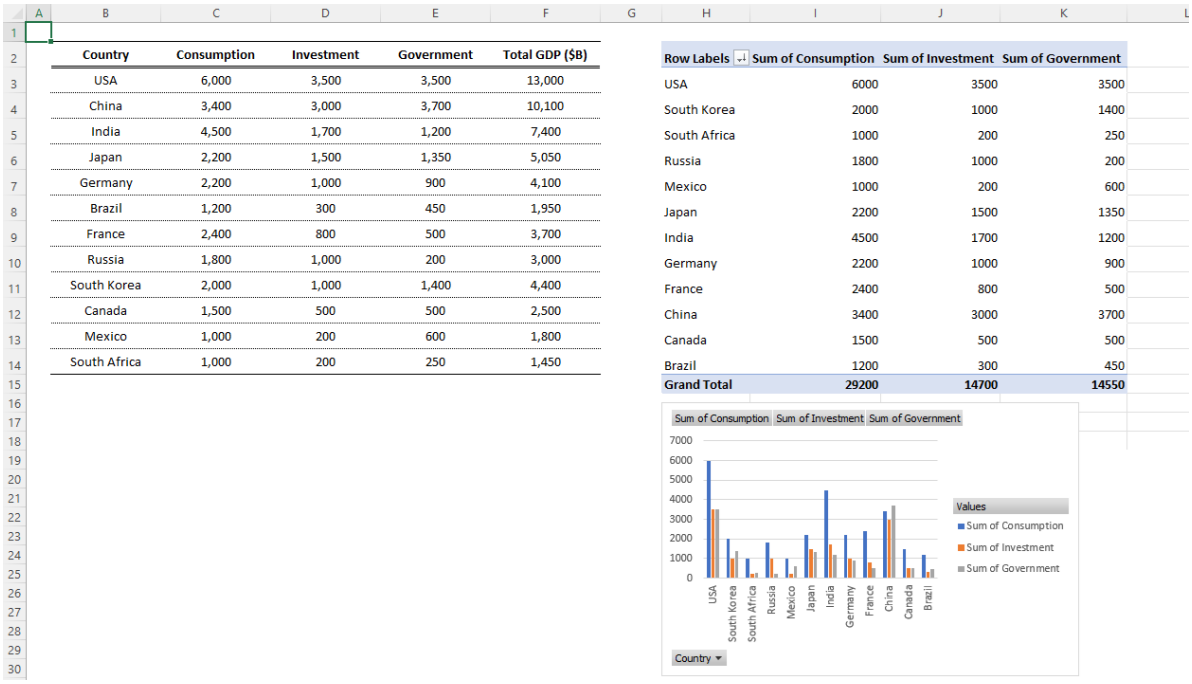
Student ID	Course	Item	Score	Weight
10001	BUSI 350	Attendance	48	10%
10001	BUSI 350	Homework	40	20%
10001	BUSI 350	Midterm	53	30%
10001	BUSI 350	Final	64	40%
10001	ECON 200	Attendance	77	10%
10001	ECON 200	Homework	74	20%
10001	ECON 200	Midterm	61	30%
10001	ECON 200	Final	33	40%
10001	ECON 380	Attendance	85	10%
10001	ECON 380	Homework	78	20%
10001	ECON 380	Midterm	70	30%
10001	ECON 380	Final	68	40%
10001	ECON 400	Attendance	100	10%
10001	ECON 400	Homework	77	20%
10001	ECON 400	Midterm	66	30%
10001	ECON 400	Final	92	40%
10002	BUSI 201	Attendance	31	10%
10002	BUSI 201	Homework	52	20%
10002	BUSI 201	Midterm	85	30%
10002	BUSI 201	Final	100	40%
10002	BUSI 335	Attendance	70	10%
10002	BUSI 335	Homework	69	20%
10002	BUSI 335	Midterm	61	30%
10002	BUSI 335	Final	88	40%
10002	BUSI 350	Attendance	89	10%

Average of Score		Item				
Student ID	Course	Attendance	Homework	Midterm	Final	Grand Total
10001	BUSI 350	47.67964321	40.44315468	53.28164148	64.37778749	51.44555671
	ECON 200	77.45646515	74.42995946	61.11309219	32.50885571	61.37709313
	ECON 380	84.60336003	77.50523905	69.51862037	68.23040758	74.96440676
	ECON 400	100	76.9473497	66.00067343	91.62405868	83.64302045
10001 Total		**77.4348671**	**67.33142572**	**62.47850687**	**64.18527736**	**67.85751926**
10002	BUSI 201	31.42406537	52.38555533	84.69433177	100	67.12598812
	BUSI 335	70.21115592	69.30830291	61.19637436	87.71824941	72.10852065
	BUSI 350	89.42019224	54.23163148	68.04745625	100	77.92481999
	ECON 301	77.42595766	30.91284115	58.8004971	69.78003509	59.22983275
	ECON 380	75.74972325	62.05598979	71.97858864	65.1118263	68.724032
	ECON 400	94.42891315	59.44121183	97.81550929	53.71230885	76.34948578
10002 Total		**73.11000127**	**54.72258875**	**73.75545957**	**79.38706994**	**70.24377988**
10003	BUSI 205	55.2445196	72.14216505	37.49032142	36.00935843	50.22159112
	BUSI 335	89.38230047	85.71912307	47.25551086	100	80.5892336
	BUSI 356	66.25509316	87.54398427	52.97816822	71.60464081	69.59547161
	ECON 371	51.21809189	24.46472119	100	61.75307229	59.35897134
10003 Total		**65.52500128**	**67.4674984**	**59.43100012**	**67.34176788**	**64.94131692**
10004	BUSI 335	61.24781883	59.39840119	53.92007729	77.11182423	62.91953038
	BUSI 356	84.28783312	59.40969438	82.59227243	69.13490841	73.85617709
10004 Total		**72.76782598**	**59.40404778**	**68.25617486**	**73.12336632**	**68.38785374**

- Consider the order of variables in the row field.
- Consider the Value Field Settings of the value field.
- Consider the blank row between each item.
- Consider the Report Layout.
- Consider the sorting order of the column variables.

Problem #3. PivotCharts: 15 Points

Navigate to worksheet `PIVOT-03`. Without editing the original data provided to you in the worksheet, insert and edit a PivotChart that matches the following figure exactly. Your grades will depend solely on the PivotChart for this problem, so there is no need to format the PivotTable for this problem. The list below the figure is a rough guideline of items that you should pay particular attention towards, but may not be a complete list.



Country	Consumption	Investment	Government	Total GDP ($B)
USA	6,000	3,500	3,500	13,000
China	3,400	3,000	3,700	10,100
India	4,500	1,700	1,200	7,400
Japan	2,200	1,500	1,350	5,050
Germany	2,200	1,000	900	4,100
Brazil	1,200	300	450	1,950
France	2,400	800	500	3,700
Russia	1,800	1,000	200	3,000
South Korea	2,000	1,000	1,400	4,400
Canada	1,500	500	500	2,500
Mexico	1,000	200	600	1,800
South Africa	1,000	200	250	1,450

Row Labels	Sum of Consumption	Sum of Investment	Sum of Government
USA	6000	3500	3500
South Korea	2000	1000	1400
South Africa	1000	200	250
Russia	1800	1000	200
Mexico	1000	200	600
Japan	2200	1500	1350
India	4500	1700	1200
Germany	2200	1000	900
France	2400	800	500
China	3400	3000	3700
Canada	1500	500	500
Brazil	1200	300	450
Grand Total	**29200**	**14700**	**14550**

- Consider the item(s) in the Axis field.
- Consider the item(s) in the Values field.

Problem #4. PivotCharts: 20 Points

Navigate to worksheet `PIVOT-04`. Without editing the original data provided to you in the worksheet, insert and edit a PivotTable that matches the following figure exactly. The list below the figure is a rough guideline of items that you should pay particular attention towards, but may not be a complete list.

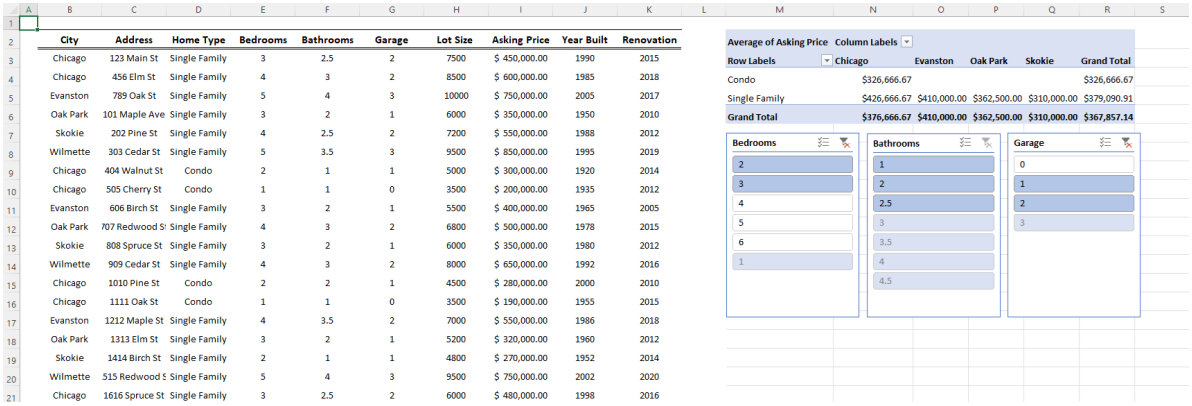
Date	Ticker	Sector	Open	High	Low	Close	Volume
19-Oct-23	AAPL	Technology	$ 176.04	$ 177.84	$ 175.19	$ 175.46	55,176,703
18-Oct-23	AAPL	Technology	$ 175.58	$ 177.58	$ 175.11	$ 175.84	54,764,400
17-Oct-23	AAPL	Technology	$ 176.65	$ 178.42	$ 174.80	$ 177.15	57,549,400
16-Oct-23	AAPL	Technology	$ 176.75	$ 179.08	$ 176.51	$ 178.72	52,517,000
13-Oct-23	AAPL	Technology	$ 181.42	$ 181.93	$ 178.14	$ 178.85	51,427,100
12-Oct-23	AAPL	Technology	$ 180.07	$ 182.34	$ 179.04	$ 180.71	56,743,100
11-Oct-23	AAPL	Technology	$ 178.20	$ 179.85	$ 177.60	$ 179.80	47,551,100
10-Oct-23	AAPL	Technology	$ 178.10	$ 179.72	$ 177.95	$ 178.39	43,698,000
9-Oct-23	AAPL	Technology	$ 176.81	$ 179.05	$ 175.80	$ 178.99	42,390,800
6-Oct-23	AAPL	Technology	$ 173.80	$ 177.99	$ 173.18	$ 177.49	57,224,100
5-Oct-23	AAPL	Technology	$ 173.79	$ 175.45	$ 172.68	$ 174.91	48,527,900
4-Oct-23	AAPL	Technology	$ 171.09	$ 174.21	$ 170.97	$ 173.66	53,020,300
3-Oct-23	AAPL	Technology	$ 172.26	$ 173.63	$ 170.82	$ 172.40	49,594,600
2-Oct-23	AAPL	Technology	$ 171.22	$ 174.30	$ 170.93	$ 173.75	52,164,500
29-Sep-23	AAPL	Technology	$ 172.02	$ 173.07	$ 170.34	$ 171.21	51,814,200
28-Sep-23	AAPL	Technology	$ 169.34	$ 172.03	$ 167.62	$ 170.69	56,294,400
27-Sep-23	AAPL	Technology	$ 172.62	$ 173.04	$ 169.05	$ 170.43	66,921,800
26-Sep-23	AAPL	Technology	$ 174.82	$ 175.20	$ 171.66	$ 171.96	64,588,900
25-Sep-23	AAPL	Technology	$ 174.20	$ 176.97	$ 174.15	$ 176.08	46,172,700
22-Sep-23	AAPL	Technology	$ 174.67	$ 177.08	$ 174.05	$ 174.79	56,725,400
21-Sep-23	AAPL	Technology	$ 174.55	$ 176.30	$ 173.86	$ 173.93	63,047,900
20-Sep-23	AAPL	Technology	$ 179.26	$ 179.70	$ 175.40	$ 175.49	58,436,200
19-Sep-23	AAPL	Technology	$ 177.52	$ 179.63	$ 177.13	$ 179.07	51,826,900
18-Sep-23	AAPL	Technology	$ 176.48	$ 179.38	$ 176.17	$ 177.97	67,257,600
15-Sep-23	AAPL	Technology	$ 176.48	$ 176.50	$ 173.82	$ 175.01	109,205,100
14-Sep-23	AAPL	Technology	$ 174.00	$ 176.10	$ 173.58	$ 175.74	60,895,800

Row Labels	Average of Close	Sum of Volume
8/1/2023 - 8/7/2023	**$ 143.09**	**801,718,000.00**
AAPL	$ 188.04	360,175,400.00
BAC	$ 31.48	162,000,800.00
C	$ 46.23	77,079,600.00
MSFT	$ 329.68	105,796,100.00
PG	$ 156.41	26,037,700.00
XOM	$ 106.73	70,628,400.00
8/8/2023 - 8/14/2023	**$ 140.71**	**726,635,700.00**
AAPL	$ 178.64	278,552,100.00
BAC	$ 31.06	171,020,100.00
C	$ 44.52	70,845,400.00
MSFT	$ 323.25	107,993,300.00
PG	$ 156.58	21,385,300.00
XOM	$ 110.23	76,839,500.00
8/15/2023 - 8/21/2023	**$ 138.04**	**742,866,200.00**
AAPL	$ 175.67	264,076,500.00
BAC	$ 29.35	194,205,700.00
C	$ 42.53	74,601,500.00
MSFT	$ 319.50	107,707,200.00
PG	$ 152.88	29,650,300.00
XOM	$ 108.33	72,625,000.00
8/22/2023 - 8/28/2023	**$ 138.74**	**683,628,800.00**
AAPL	$ 178.71	245,023,100.00
BAC	$ 28.55	181,536,200.00
C	$ 41.15	83,327,200.00

- Consider how the dates are given by weeks.
- Consider the order of the row variables.
- Consider the Value Field Settings of the value field.
- Consider the formatting of the numbers in the value field.

Problem #5. PivotCharts: 20 Points

Navigate to worksheet `PIVOT-05`. Without editing the original data provided to you in the worksheet, insert and edit a PivotTable with Slicers that matches the following figure exactly. The list below the figure is a rough guideline of items that you should pay particular attention towards, but may not be a complete list.



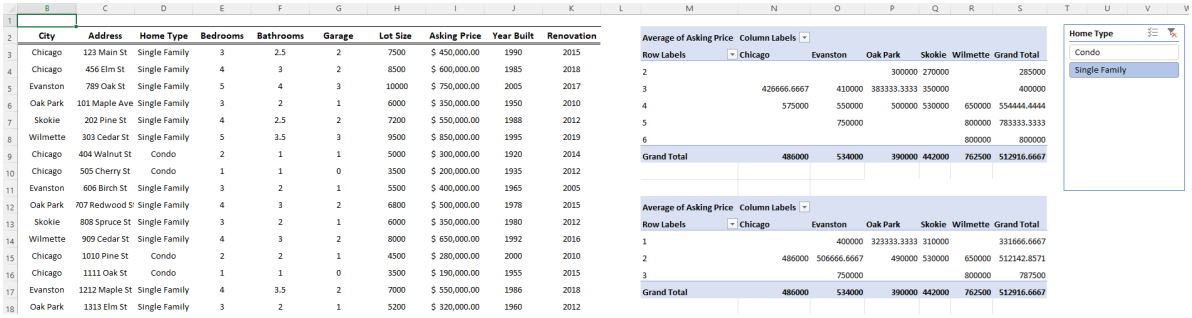
City	Address	Home Type	Bedrooms	Bathrooms	Garage	Lot Size	Asking Price	Year Built	Renovation
Chicago	123 Main St	Single Family	3	2.5	2	7500	$ 450,000.00	1990	2015
Chicago	456 Elm St	Single Family	4	3	2	8500	$ 600,000.00	1985	2018
Evanston	789 Oak St	Single Family	5	4	3	10000	$ 750,000.00	2005	2017
Oak Park	101 Maple Ave	Single Family	3	2	1	6000	$ 350,000.00	1950	2010
Skokie	202 Pine St	Single Family	4	2.5	2	7200	$ 550,000.00	1988	2012
Wilmette	303 Cedar St	Single Family	5	3.5	3	9500	$ 850,000.00	1995	2019
Chicago	404 Walnut St	Condo	2	1	1	5000	$ 300,000.00	1920	2014
Chicago	505 Cherry St	Condo	1	1	0	3500	$ 200,000.00	1935	2012
Evanston	606 Birch St	Single Family	3	2	1	5500	$ 400,000.00	1965	2005
Oak Park	707 Redwood St	Single Family	4	3	2	6800	$ 500,000.00	1978	2015
Skokie	808 Spruce St	Single Family	3	2	1	6000	$ 350,000.00	1980	2012
Wilmette	909 Cedar St	Single Family	4	3	2	8000	$ 650,000.00	1992	2016
Chicago	1010 Pine St	Condo	2	2	1	4500	$ 280,000.00	2000	2010
Chicago	1111 Oak St	Condo	1	1	0	3500	$ 190,000.00	1955	2015
Evanston	1212 Maple St	Single Family	4	3.5	2	7000	$ 550,000.00	1986	2018
Oak Park	1313 Elm St	Single Family	3	2	1	5200	$ 320,000.00	1960	2012
Skokie	1414 Birch St	Single Family	2	1	1	4800	$ 270,000.00	1952	2014
Wilmette	515 Redwood S	Single Family	5	4	3	9500	$ 750,000.00	2002	2020
Chicago	1616 Spruce St	Single Family	3	2.5	2	6000	$ 480,000.00	1998	2016

Average of Asking Price	Column Labels				
Row Labels	Chicago	Evanston	Oak Park	Skokie	Grand Total
Condo	$326,666.67				$326,666.67
Single Family	$426,666.67	$410,000.00	$362,500.00	$310,000.00	$379,090.91
Grand Total	$376,666.67	$410,000.00	$362,500.00	$310,000.00	$367,857.14

- Consider the Value Field Settings of the value field.
- Consider the formatting of the numbers in the value field.
- Consider which variables are used to create the Slicers.
- Consider the which values the Slicers are filtering.
- Consider the formatting of the numbers in the value field.

Problem #6. PivotCharts: 15 Points

Navigate to worksheet `PIVOT-06`, which is a duplicate of `PIVOT-05`. Without editing the original data provided to you in the worksheet, insert and edit two PivotTables with a single Slicer that matches the following figure exactly. The list below the figure is a rough guideline of items that you should pay particular attention towards, but may not be a complete list.



City	Address	Home Type	Bedrooms	Bathrooms	Garage	Lot Size	Asking Price	Year Built	Renovation
Chicago	123 Main St	Single Family	3	2.5	2	7500	$ 450,000.00	1990	2015
Chicago	456 Elm St	Single Family	4	3	2	8500	$ 600,000.00	1985	2018
Evanston	789 Oak St	Single Family	5	4	3	10000	$ 750,000.00	2005	2017
Oak Park	101 Maple Ave	Single Family	3	2	1	6000	$ 350,000.00	1950	2010
Skokie	202 Pine St	Single Family	4	2.5	2	7200	$ 550,000.00	1988	2012
Wilmette	303 Cedar St	Single Family	5	3.5	3	9500	$ 850,000.00	1995	2019
Chicago	404 Walnut St	Condo	2	1	1	5000	$ 300,000.00	1920	2014
Chicago	505 Cherry St	Condo	1	1	0	3500	$ 200,000.00	1935	2012
Evanston	606 Birch St	Single Family	3	2	1	5500	$ 400,000.00	1965	2005
Oak Park	707 Redwood St	Single Family	4	3	2	6800	$ 500,000.00	1978	2015
Skokie	808 Spruce St	Single Family	3	2	1	6000	$ 350,000.00	1980	2012
Wilmette	909 Cedar St	Single Family	4	3	2	8000	$ 650,000.00	1992	2016
Chicago	1010 Pine St	Condo	2	2	1	4500	$ 280,000.00	2000	2010
Chicago	1111 Oak St	Condo	1	1	0	3500	$ 190,000.00	1955	2015
Evanston	1212 Maple St	Single Family	4	3.5	2	7000	$ 550,000.00	1986	2018
Oak Park	1313 Elm St	Single Family	3	2	1	5200	$ 320,000.00	1960	2012

Average of Asking Price	Column Labels					
Row Labels	Chicago	Evanston	Oak Park	Skokie	Wilmette	Grand Total
2			300000	270000		285000
3	426666.6667	410000	383333.3333	350000		400000
4	575000	550000	500000	530000	650000	554444.4444
5		750000			800000	783333.3333
6					800000	800000
Grand Total	486000	534000	390000	442000	762500	512916.6667

Average of Asking Price	Column Labels					
Row Labels	Chicago	Evanston	Oak Park	Skokie	Wilmette	Grand Total
1		400000	323333.3333	310000		331666.6667
2	486000	506666.6667	490000	530000	650000	512142.8571
3		750000			800000	787500
Grand Total	486000	534000	390000	442000	762500	512916.6667

Home Type
Condo
Single Family

- **The Slicer must be able to filter both PivotTables.**
- Consider the Value Field Settings of the value field.
- Consider the formatting of the numbers in the value field.
- Consider which variable is used to create the Slicers.
- Consider the formatting of the numbers in the value field.

- Original Score: _____
- Recovered Score: _____
- Original Date: _____
- Recovered Date: _____