

## Capstone Project 1

You are currently employed at a medium-sized financial management firm, Durban & Associates, as a financial analyst. Your boss recently authorized the purchase of a new laptop computer for your use at home and in the office. She asked you to obtain three competitive bids before she approves the purchase. The minimum requirements of the systems you want to buy are as follows:

|                                                        |                       |
|--------------------------------------------------------|-----------------------|
| Processor – w/Intel Core i7 with at least a 15" screen | Long Life Battery     |
| Minimum 8GB of Ram                                     | DVD recordable device |
| Minimum 500 GB Hard Drive                              | Video card            |
| Windows 8.1 Professional                               | Full 3-year warranty  |
| Camera Built in                                        | Carrying case         |
| Bluetooth Connections                                  | Shipping              |

Table 1 shows information for three possible computers based on Web site pricing. The features do not match up exactly, so you need to create a worksheet comparing all three systems and their total prices.

(Note that the models, features and pricing are fictitious and do not constitute advice on any computer purchase)

| Dell Laptop                                                                                                                                                                                                                                                                                | Sony Laptop                                                                                                                                                                                                                                                                            | Lenovo Laptop                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dell Alienware ZBY; 2.2 GHz Intel Core i7-2670QM Quad-Core including 8-GB of DDR3 RAM, 500 GB hard drive; DVD-R/W, 18" display, long-life Battery, video camera and video card, Windows 8.1 Professional, Wi-Fi/ Bluetooth/ Broadband capable, 3-year warranty, Shipping included...\$1749 | Sony VAIO RMV w/3 <sup>rd</sup> Gen Intel Core i7-3612QM (2.10GHz) including 8-GB of RAM, 300 GB hard drive, 15.5" display, video card, DVD-r/W drive, built-in video camera, Windows 8 Home Basic, Wi-fi/ Broadband/ Bluetooth capable, carry case, standard 1-year warranty...\$1449 | Lenovo ThinkPad D Intel Core i7-3520M Processor (2.2 GHz), 4 GB of RAM, 250 GB hard drive, 15.4" display, Windows 8.1 Professional and video card, Wi-fi and broadband capable, 1-year warranty, free shipping...\$1104 |
| Additional items:                                                                                                                                                                                                                                                                          | Additional items:                                                                                                                                                                                                                                                                      | Upgrade to 8 GB of RAM \$130                                                                                                                                                                                            |
| Carrying case \$79.95                                                                                                                                                                                                                                                                      | Hard drive upgrade to 600 GB \$59.99                                                                                                                                                                                                                                                   | Upgrade to 500 GB hard drive 7200 rpm \$60                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                            | Upgrade to Windows 8.1 Professional \$69                                                                                                                                                                                                                                               | Built-in video camera \$29                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                            | Long-life battery upgrade \$149                                                                                                                                                                                                                                                        | Bluetooth \$30                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                            | 3-year warranty \$249.99                                                                                                                                                                                                                                                               | DVD-R/W drive \$115                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                            | Shipping cost \$46                                                                                                                                                                                                                                                                     | Long-life battery \$70                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                        | 3-year warranty \$195.30                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                        | Carrying case \$65                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                         |

Table 1

You are to complete the following:

1. Create a new workbook named Computer\_Purchase\_nn.xlsx where nn are your initials. For example, if your name were John Smith, the name of your file would be Computer\_Purchase\_JS.xlsx.
2. Create a worksheet that compares the cost of each of the listed items for the three computers. Organize the worksheet so that each component is listed separately. If an item is included in the basic computer price, enter a zero. Be sure to include the following elements:
  - a. A title formatted in Cambria, size 14, bold, and italic. Merge the center and title above your worksheet and add a light blue fill.
  - b. Appropriate column and row headings so that your worksheet is easy to understand. If necessary, wrap the text headings into more than one row in the cell
  - c. Numbers in the first row and in any summation rows formatted with the Accounting Number Format. Format all other dollar values with the Comma Style. Note that zeros will appear as dashes.
3. Calculate the total cost of each system, assuming all items listed for that system are purchased, and then format the totals with Accounting Number Format. Enter a label for the row of total, right align the label, and use bold italic formatting.
4. Verify that the totals are accurate even if other values are later substituted for any of the system component costs.
5. Highlight the cell containing the name of the least expensive computer system in yellow.
6. You learn from your boss that the corporation is planning to purchase at least 40 similar systems. Because of this volume, the following price reductions are now available:
  - a. Dell has agreed to a rebate of \$150 per machine.
  - b. Sony has agreed to give an 18% across-the-board discount on everything but shipping, which remains at \$46 per system.
  - c. Lenovo has declined to give any volume purchase discount.

Skip at least two rows at the bottom of your current data. In a separate area, calculate the total cost of a single machine from each competitor using this new pricing structure. Reference the values you have previously calculated as needed.

7. Just below the calculation for Step 6, calculate the cost of purchasing the 40 machines with this new pricing structure for each option.
8. Highlight the cell containing the lowest final cost for 40 machines in a shade of light green.
9. Submit your solution to Blackboard using the file name Computer\_Purchase\_nn.xlsx.