# **CPSC 203**

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## Lab-Quiz 1 (Instructions)

- Come at least 5 minutes early
- Present your photo ID
- You should write your name on the question paper and sign the handout sheet
- You should return back the handout at the end of the exam (IMPORTANT!!!!)
- No use of Internet or Cell Phones
- Do not talk during the exam or look at someone else's monitor
- You are not allowed to use your laptop
- Submission will be through blackboard (Click Submit and not Save)

#### You are allowed to 🙄

Bring any course material (hard copy) that they need, including printed wiki material.

Use Microsoft Excel Help

## **Skill List for Excel is**

- Type in some basic data used for rest of the quiz
- Autofill a field(s)
- Set up appropriate Field formats (Currency, Numbers, Text, etc.)
- □ Calculate Basic Statistics (Min, Max, Average, SD, Median)
- Use Chart Wizard to do a default chart on a data set.
- Customize a chart according to good chart design principles
- Do a custom calculation using a formula (possibly in several steps)
- □ Use a nested If ... Then statement to define classes.
- □ Use a Lookup table and Vlookup to define classes.
- Summarize data in a Pivot table.
- Sorting and Filtering

#### Syntax of If-Else statement

IF(<logic statement>, <true statement>,



#### $\blacksquare = IF(A2 < 50, "Fail", "Pass")$

#### ■ = IF(A1<50, "Fail, IF(A1>80, "A", "B"))

### Lookup Tables: Syntax

- = Lookup(lookup\_value, lookup\_vector, [result\_vector])
  - lookup\_value is the value to search for in the lookup\_range
  - lookup\_vector is a single row or single column of data that is sorted in ascending order (the Lookup function searches for value in this range)
  - [result\_vector] is a single row or single column of data that is the same size as the lookup\_range; the Lookup function searches for the value in the lookup\_range and returns the value from the same position in the result\_range
- =Lookup(lookup\_value, array)
  - lookup\_value is the value to search for in the array (values must be in ascending order)
  - array is an array of values that contains both the values to search for and return

## Lookup Tables (3)

For each result cell, add a LOOKUP statement. The second part of the LOOKUP can refer to the entire first and second column (A:B)

| E2 • <i>f</i> <sub>x</sub> =LOOKUP(D2,A:B) |           |        |   |                  |        |
|--|-----------|--------|---|------------------|--------|
|  | А         | В      | С | D                | E      |
| 1  | Frequency | Colour |   | Value to look up | Result |
| 2  | 4.14      | red    |   | 4.19             | orange |
| 3  | 4.19      | orange |   | 5                | orange |
| 4  | 5.17      | yellow |   | 7.66             | blue   |
| 5  | 5.77      | green  |   | 0                | #N/A   |
| 6  | 6.39      | blue   |   |                  |        |
| 7  |           |        |   |                  |        |

## Lookup Tables (5)

- VLOOKUP is similar to LOOKUP, but allows you to specify a specific column to return as the result. LOOKUP always returns the second column's value as a result.
- The syntax for the VLOOKUP function is: =VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])

## **Quick Tips for If-Statement**

- Don't forget quotes for string. "Shreya" or "A"
- Check your bracket balancing
- Don't forget commas or don't add additional commas.
- Keep the format in mind (Where should be true value and where should be the false value)
- Always, ask yourself if the answer is correct or not for randomly selected values
- Don't forget >= (if required)

Ref: Dina Said's presentation

# **Quick Tips for Pivot Tables**

- Make sure which variables are required to be in rows and which are required to be in columns
- Do not forget to include the column headings in the selected data set.
- Double check the function required; e.g. max, min or avg
- Again ask yourself if the answer is correct

Ref: Dina Said's presentation

#### Open for Doubts!!