**IS 312 Excel Assignment 2** (15 points)

We’re NOT doing VLOOKUP yet! !

Points distribution: 4, 4, 4, 3

**General requirements** same as HW 1 (print values AND formulas; exact use of given sheet; use 12-point font size; use parameters; printouts in order; formula display in full; formatting –**violations subject to 2-point penalty EACH occurrence**) 【It is advised that you refer to HW1 for all requirements】

You may want to use landscape orientation \*if\* you have a short but wide spreadsheet.

At the beginning of each problem, the type of skills needed are indicated to “steer” you on track.

**1. Nested IF, and *mixed* reference:** 【Format appropriately - $ and %】

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E | F | G | H | I | J |
| 1 | (*Last name*) |  | (*First name*) |  |  | Changes – “Increase”, “Decrease”, or “Same” | | Percent of YTD | | |
| 2 | 2017 | Q1 | Q2 | Q3 | YTD | Q1 to Q2 | Q2 to Q3 | Q1 | Q2 | Q3 |
| 3 | 1020 | 1030 | 1010 |  |  |  |  |  |  |
| 4 | 2016 | Q1 | Q2 | Q3 | YTD | Q1 to Q2 | Q2 to Q3 | Q1 | Q2 | Q3 |
| 5 | 930 | 950 | 950 |  |  |  |  |  |  |

|🡨---------------------Data entry -----------------------🡪|**🡨--------------------------------- Your formulas --------------------------------------------------🡪**|

Based on the above spreadsheet template,

(1) Write a formula for E3 to calculate YTD, and then copy it to E5. Hint: YTD = sum of Q1 through Q3.

(2) Write a nested IF formula for F3, to determine whether Q2 is INCREASED from Q1 or DECREASED or SAME. Then copy the formula to G3, and then from F3:G3 to F5:G5.

(3) Write a formula in H3 to calculate the percentage of each quarter in YTD. Hint: *percent of Q1* = Q1/YTD. Use MIXED REFERENCE. Copy this formula to I3:J3, and then copy H3:J3 to H5:J5.

**2. SUMIF and COUNTIF:**

Create a spreadsheet using data given below – and place data in the exact cells. Write the following formulas:

E4: Total for the sales amounts from in-store transactions; E5 and E6: same logic for online and phone.

F4: Count the number of in-store transactions; F5 and F6: same logic for online and phone.

E11: Totals of those transactions with amount greater than $500

These 2 columns must be formatted to show $ sign

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** |
| **1** | (*Last,*) | (*First name*) |  |  |  |  |
| **2** | **Date** | **Type of Trans.** | **Sales $** |  |  |  |
| **3** | Feb-12 | Online | 600 | **Types:** | **Total $:** | **# transactions:** |
| **4** | Feb-12 | Store | 1200 | **Store** |  |  |
| **5** | Feb-12 | Telephone | 200 | **Online** |  |  |
| **6** | Feb-12 | Store | 1400 | **Telephone** |  |  |
| **7** | Feb-12 | Store | 500 |  |  |  |
| **8** | Feb-13 | Online | 300 | E11: Total of those sales **greater than** $500 (total of “big sales”)  {Note: merge cells D8:F10, part of formatting requirement} | | |
| **9** | Feb-13 | Online | 400 |
| **10** | Feb-13 | Telephone | 200 |
| **11** | Feb-13 | Online | 1000 | ∑“Big sales”: |  |  |

3. **Nested IF + Mixed Ref**

Given the sales amounts and commission rates, calculate commission amounts, using ONE formula that will be first entered in C3 and then copied to the whole columns C and E. (Spreadsheet template next page)

**Columns B~F** must be formatted to **show $ sign**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** | **G** |
| **1** | (*Last N*) |  | (*First name*) |  |  |  |  |
| **2** | **Rep**  **Name** | **Q2**  **Sales ($)** | **Q2 Commission**  **($)** | **Q3**  **Sales ($)** | **Q3 Commission**  **($)** | **Commission Rates** | |
| **3** | Adam | 1200 |  | 1500 |  | **Threshold ($)** | **Rate** |
| **4** | Ben | 299 |  | 499 |  | 2000 | 2.5% |
| **5** | Candy | 300 |  | 400 |  | 1000 | 2.2% |
| **6** | Dan | 1000 |  | 1999 |  | 500 | 2% |
| **7** | Edward | 299 |  | 500 |  | 300 | 1.5% |
| **8** | Frank | 300 |  | 499 |  | Otherwise | 0 |
| **9** | Greg | 400 |  | 499 |  | If a sales amount **reaches** the threshold on column F, the rep will be entitled to the corresponding rate in G | |
| **10** | Hank | 1995 |  | 2000 |  |
|  | (Note: The logic is similar to that of determining grades – A-B-C-D-F) | | | | |

**4. Multiple conditions (with AND or OR)**

The CSU-North Central (“CSUNC”) MSA program has the following admission requirements:

1. GPA >=3.2 ***AND*** GMAT score >=570, Clearly Admitted;
2. GPA <3.0 ***AND*** GMAT <550, Reject;
3. All other situations: Conditionally Admitted.

The following is a section of the applicants’ data. Please write a formula to determine the admission status of each candidate.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E |
| 1 | Last-Name | | Fist-Name | |  |
| 2 | No | Applicant | GPA | GMAT | Status (Formula) |
| 3 | 1 | Adams, John | 3.4 | 555 |  |
| 4 | 2 | Brown, Jerry | 3.1 | 650 |  |
| 5 | 3 | Chen, Ming | 3.1 | 545 |  |
| 6 | 4 | Davis, Gray | 3.0 | 540 |  |
| 7 | 5 | Edwards, John | 3.3 | 560 |  |
| 8 | 6 | Feinstein, Dianne | 3.3 | 533 |  |
| 9 | 7 | Gonzalez, Juan | 3.2 | 570 |  |
| 10 | 8 | Hughes, Howard | 3.3 | 570 |  |

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Precaution:

Please work on the Excel homeworks **independently**!! Taking other’s formulas is a direct and significant act of academic dishonesty, and will be very easy to identify in the context of formulas. So please do NOT take chance.