DAY 2.

## General Note:

For most of the below exercises, multiple solutions are possible. Try to solve with minimum looping over the internal tables.

**Get-Last**: Create an ITAB. Write code to print the last line. If there are no records, it should tell the user there are no records.

**COMPRESSION:** Create an ITAB\_A with the below rows. Then based on ITAB\_A, fill up the ITAB\_SUMMARY. The ITAB\_SUMMARY will have only the unique names from ITAB\_A, and the amount in ITAB\_SUMMARY will be sum of the amounts for that name in A. The count column in ITAB\_SUMMARY should give the number of records for that name in A

Example: Jesse has three records, with the amounts 100,130 and 30. So in the summary table, put one record with the name Jesse, the amount as 260 and the count as 3

|  |  |
| --- | --- |
| **ITAB\_A** | **ITAB\_SUMMARY** |
| |  |  | | --- | --- | | **Name** | **Amount** | | Jesse | 100 | | Jesse | 130 | | Hank | 220 | | Hank | 300 | | Jesse | 30 | | Gus | -700 | | Walt | 1000 | | Walt | -900 | | |  |  |  | | --- | --- | --- | | **Name** | **Amount** | **Count** | | Jesse | 260 | 3 | | Hank | 520 | 2 | | Gus | -700 | 1 | | Walt | 100 | 2 | |

**ALPHA**: Create ITAB\_A and ITAB\_B below. Insert each ITAB\_A record to ITAB\_C only if a matching record is there in ITAB\_B

Example: ITAB\_A contains many names, but only Jesse and Walt are present in ITAB\_B (highlighted), so only the records for those two names will be inserted to C.

|  |  |  |
| --- | --- | --- |
| **ITAB\_A** | **ITAB\_B** | **ITAB\_C** |
| |  |  | | --- | --- | | **Name** | **Amount** | | Jesse | 100 | | Jesse | 130 | | Hank | 220 | | Hank | 300 | | Jesse | 30 | | Gus | -700 | | Walt | 1000 | | Walt | -900 | | |  | | --- | | **Name** | | Jesse | | Mike | | Goodman | | Walt | | |  |  | | --- | --- | | **Name** | **Amount** | | Jesse | 100 | | Jesse | 130 | | Jesse | 30 | | Walt | 1000 | | Walt | -900 | |

**BRAVO**: Similar to above, but include ALL records from ITAB\_A. Also, mark unmatched records with “No” if there are no matches in ITAB\_B

Example: Jesse and Walt from ITAB\_A are present in ITAB\_B, so copy them to C and mark the “Found” column as ‘Yes’.

Hank and Gus are present in A, but there are not present in B. So copy them to C and mark the “Found” column as ‘No’

|  |  |  |
| --- | --- | --- |
| **ITAB\_A** | **ITAB\_B** | **ITAB\_C** |
| Same as ITAB\_A above | Same as ITAB\_B above | |  |  |  | | --- | --- | --- | | **Name** | **Amount** | **Found** | | Jesse | 100 | Yes | | Jesse | 130 | Yes | | Hank | 220 | No | | Hank | 300 | No | | Jesse | 30 | Yes | | Gus | -700 | No | | Walt | 1000 | Yes | |

**ALSO**: Suggest more appropriate names for the ALPHA and BRAVO exercises above. Are those examples similar to anything you have seen before this?

**RANKING:** Take ITAB\_SUMMARY from above and produce a ranking table as below. Note that a new “Rank” column has to be added, and the rank is based on the amount. The output should be as below. Note the order of the output rows.

|  |
| --- |
| **ITAB\_RANKS** |
| |  |  |  |  | | --- | --- | --- | --- | | **Name** | **Amount** | **Count** | **Rank** | | Hank | 520 | 2 | 1 | | Jesse | 260 | 3 | 2 | | Walt | 100 | 2 | 3 | | Gus | -700 | 1 | 4 | |

**Asians**: Take the below countries table and print out only those countries that are in Asia

|  |  |
| --- | --- |
| **Country** | **Region** |
| India | Asia |
| New Zealand | Australia |
| Japan | Asia |
| Netherlands | EU |
| England | EU |
| Poland | EU |

**Lands**: show only those countries that have “land” in their name from the countries table

**Realignment**: Take the above internal table and print out all the contents. Then, change the region for all Asian countries to “APAC” and again print out all the contents.

**Latest Dates**: Take the ITAB\_NAMES and ITAB\_DATES table. Now, derive the ITAB\_LATEST\_DATES table. The latest dates table will contain the maximum date for each name. If there are no dates for a name in ITAB\_DATES, then populate the current date in the latest dates table.

Example: For the name “Walt”, the latest date in ITAB\_DATES is 20140504 (highlighted). So put this date for Walt in the ITAB\_LATEST\_DATES.

But for the name “Goodman”, there are no dates in ITAB\_DATES. So put a record in ITAB\_LATEST\_DATES and put the current date in the date column.

|  |  |  |
| --- | --- | --- |
| **ITAB\_NAMES** | **ITAB\_DATES** | **ITAB\_LATEST\_DATES** |
| |  | | --- | | **Name** | | Jesse | | Walt | | Goodman | | |  |  | | --- | --- | | **Name** | **Date** | | Jesse | 20140101 | | Jesse | 20140301 | | Jesse | 20140201 | | Walt | 20140107 | | Walt | 20140504 | | |  |  | | --- | --- | | **Name** | **Date** | | Jesse | 20140301 | | Walt | 20140504 | | Goodman | <<current date>> | |

Hint: Google Is Your Friend ☺