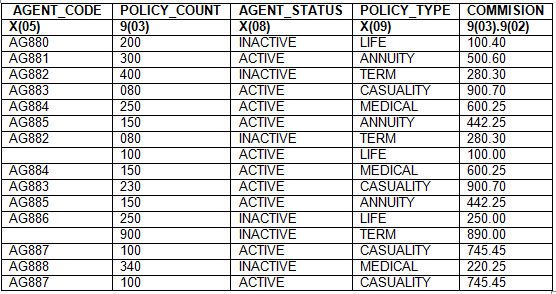
MINI CASE STUDY: **AGENT**

**STEP1:** **ISPF**

* Allocate a PS dataset with record length 80 with naming convention as below.  
  PS1 - <USERID>.L1G.AGTCMN.PS1
* Using the details from below file layout, enter records into the PS1 file as per the instructions given,
  + **Do not enter 1strow** in PS file. 1st row contains header details for reference.
  + **Do not enter 2nd row** in PS file. 2nd row contains layout details for reference.
  + One space filler had to be inserted between each field in the PS file.
  + All alphanumeric data to be entered in **CAPITAL** letters.



**STEP2: JCL**

1.  JCL member naming convension **JA11G<yyy>,** where <yyy> denotes last 3 digits of your user ID. Proper JOB card without any **RESTART** step to be given.

* + Allocatea VSAM KSDS dataset with the following specifications,  
    RECORDSIZE (80, 80)  
    Name: <USERID>.L1G.AGTCMN.KSDS  
    Key Field: Agent\_Code    X(05)

**STEP3:  JCL**

1.  JCL member naming convention **JA21G<yyy>,** where <yyy> denotes last 3 digits of your user ID. Proper JOB card without any **RESTART** step to be given.

* + Using Sort utility perform the below operations on PS1 and store the output in PS2 file. PS2 -> <USERID>.L1G.AGTCMN.PS2. First step in this job should be the DELETE step for PS2 file.

                       i.    Sort records in ascending order based on Agent\_code.  
                       ii.    Eliminate records which have with AGENT\_CODE as blanks.  
                       iii.    Extract 12 records from 2nd record into output. If file contains 18 records after sorting and eliminating blank AGENT\_CODE, this step should extract 2nd to 13th records.  
                       iv.    Eliminate the duplicate records by adding the Policy count field. The key to eliminate duplicate records will be Agent\_Code.

**EX :** If AG885 contains 2 records with value150in policy countfield in each record, then the output file should contain single AG885 record with policy count value 300.

**STEP4: COBOL**

Input file to be used in the program        **:**<USERID>.L1G.AGTCMN.PS2  
          **DD name to be used                 : INPAGTPS**

Output file to be used in the program     **:**<USERID>. L1G.AGTCMN.KSDS  
          **DD name to be used                 : OUTAGTKS**

*Note: Please use only the****above mentioned DD names****.*

Write a COBOL program to perform the following,

* + Read records from input PS2 dataset(<USERID>.L1G.AGTCMN.PS2) and validate input values for each field in the input file.
    - * Check whether POLICY\_COUNT is numeric
      * Check whether AGENT\_STATUS is either ‘ACTIVE’ or ‘INACTIVE’
      * Check whether POLICY\_TYPE field is not blank.
      * Check whether COMMISION  is **numeric before and after decimal point**.
  + If the input record does not pass through the validations specified above successfully, then skip that input record and start processing the next record.
  + Do the following processing for every record which has passed through the validations successfully.
    - If AGENT\_STATUS is ‘INACTIVE’ then skip that record and start processing next record.
    - If AGENT\_STATUS is ‘ACTIVE’ and POLICY\_COUNT is less than 300
      * Write GRADE field of corresponding record as ‘AVERAGE’.
    - If AGENT\_STATUS is ‘ACTIVE’ and POLICY\_COUNT is equal to 300
    - Write GRADE field of corresponding record as ‘GOOD’.
    - If AGENT\_STATUS is ‘ACTIVE’ and POLICY\_COUNT is greater than 300
    - Write GRADE field of corresponding record as ‘EXCELLENT’.
    - **Using a sub-program**, calculate TOTAL\_COMM using below formula . TOTAL\_COMM value should be rounded off to two decimal places. Return TOTAL\_COMM value to main program.         **TOTAL\_COMM = POLICY COUNT \* COMMISION**
    - Write output file in below file format without header.

*NOTE :****One space****filler to be inserted between each field.*



* Compile and run the above COBOL program to achieve the results. RUNJCL has to be stored in member with the naming convention "**JA31G<YYY>**"

**INSTRUCTIONS:**

* Follow the proper coding standards.
* Provide proper error handling routines.
* Place all the final deliverables into the PDS dataset :  **‘<USERID>.<X>.<Y>.PDS’ .**Where X ->  L1 and Y denotes 8 digit Batch name. Example:  Y- CHNMJ001  
                 [Example of **L1 PDS              – TECN001.L1.CHNMJ001.PDS]**                 
   For JCL’s, the member name should be “JA<x>1G<yyy>”  
  Note: Where <x> denotes the member no.(1 for 1st, 2 for 2ndmember) and <yyy> denotes the last 3 digits of your user ID.
  + - JCL's should be named in the member names as suggested in the respective steps.
* For COBOL Program, the member name should be “CA<x>1G<yyy>”  
  Note: Where <x> denotes the member no. (1 for 1st, 2 for 2ndmember) and <yyy> denotes the last 3 digits of your user ID.  
  If there are 2 members for a COBOL (Main program and sub program) created by ID TECN001, the member name should be “CA11G001” and”CA21G001”.

**EXPECTED DELIVERABLES in Mainframe PDS ‘<USERID>.<X>.<Y>.PDS’:**

* JCL for STEP2 and STEP3 in member names suggested in steps.
* COBOL programs in member names suggested.
* RUNJCL for the COBOL program.

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