```
LIBNAME SSN2 '/home/debendra330/BATCH_202404/SESSION_2/A3.SAS_DATASET';
RUN;

/* READING DATA FROM EXCEL */

OPTIONS VALIDVARNAME=V7;
PROC IMPORT OUT=SSN2.MED_2024
            DATAFILE='/home/debendra330/BATCH_202404/SESSION_2/A1.RAW_DATA/a1.MED_STORE_2021.xlsx'
            DBMS= XLSX REPLACE;
            SHEET='MED_AUS';
RUN;

/* USING SET STATEMENT TO CREATE A NEW DATASET FROM EXISTING DATASET */

DATA MED_AUS;
SET SSN2.MED_2024;
RUN;

PROC PRINT DATA=MED_AUS;
RUN;

/* SAS PROGRAMMING STEP */
==========================================

/* 1. DATA STEP */
/* 2. PROC STEP */

/* 1. DATA STEP - TO CREATE DATASETS. STARTS WITH DATA STATEMENT AND ENDS WITH RUN */

DATA SSN2.STAFF;
INFILE '/home/debendra330/BATCH_202404/SESSION_2/A1.RAW_DATA/a2.EMPLIST.txt';
INPUT LAST_NAME $ 1-20 FIRST_NAME $ 21-30 EMP_CODE $ 31-35 JOBTITLE $ 36-43 DOJ SALARY 54-59;
INFORMAT DOJ MMDDYY8.;
FORMAT DOJ MMDDYY8.;
RUN;

/* 2. PROC STEP - IT CAN BE USED TO PRINT DATA, OR CREATE SUMMARIZED REPORTS */

PROC PRINT DATA=SSN2.STAFF;
RUN;

/* KEEP AS A STATEMENT AND AS AN OPTION */
===================================================

/* KEEP AS A STATEMENT */
DATA MED_V1;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE TOWN NO_OF_TRIPS SPENT_AMOUNT;
RUN;

/* KEEP AS AN OPTION WITH DATA STATEMENT */
DATA MED_V1 (KEEP=CUSTOMER_ID COMPANY GENDER AGE STATE_CODE TOWN NO_OF_TRIPS SPENT_AMOUNT);
SET SSN2.MED_2024;
RUN;

/* KEEP AS AN OPTION WITH SET STATEMENT */
DATA MED_V1;
SET SSN2.MED_2024 (KEEP=CUSTOMER_ID COMPANY GENDER AGE STATE_CODE TOWN NO_OF_TRIPS SPENT_AMOUNT);
RUN;

/* INTERVIEW QUESTION : WHICH KEEP STATEMENT OR OPTION PROCESSES THE DATA FASTER */

/* 1. KEEP AS AN OPTION WITH SET STATEMENT IS FASTEST */
/* 2. KEEP AS AN OPTION WITH DATA STATEMENT */
/* 3. KEEP AS A STATEMENT */

/* DROP AS A STATEMENT AND AS AN OPTION */
================================================
PROC PRINT DATA=SSN2.MED_2024;
RUN;

/* DROP AS A STATEMENT */
DATA MED_V2;
SET SSN2.MED_2024;
DROP CARD_REG_DATE FIRST_USE_DTE;
RUN;

/* DROP AS AN OPTION WITH DATA STATEMENT */
DATA MED_V2 (DROP = CARD_REG_DATE FIRST_USE_DTE);
SET SSN2.MED_2024;
RUN;

/* DROP AS AN OPTION WITH SET STATEMENT */
DATA MED_V2;
SET SSN2.MED_2024 (DROP=CARD_REG_DATE FIRST_USE_DTE);
RUN;

/* RENAME AS A STATEMENT AND AS AN OPTION */
======================================================

PROC PRINT DATA=SSN2.STAFF;
RUN;

/* RENAME AS A STATEMENT */
DATA STAFF_NEW;
SET SSN2.STAFF;
RENAME LAST_NAME=SURNAME FIRST_NAME=FNAME EMP_CODE=EMP_ID JOBTITLE=DESIGNATION;
RUN;

/* WHEN WE USE RENAME, IT PERMANENTLY CHANGES THE NAME OF THE COLUMN */

/* RENAME AS AN OPTION WITH DATA STATEMENT */
DATA STAFF_NEW (RENAME=(LAST_NAME=SURNAME FIRST_NAME=FNAME EMP_CODE=EMP_ID JOBTITLE=DESIGNATION));
SET SSN2.STAFF;
RUN;

/* RENAME AS AN OPTION WITH SET STATEMENT */
DATA STAFF_NEW ;
SET SSN2.STAFF (RENAME=(LAST_NAME=SURNAME FIRST_NAME=FNAME EMP_CODE=EMP_ID JOBTITLE=DESIGNATION));
RUN;

/* LABEL AS A STATEMENT AS AND AS AN OPTION */
=======================================================

DATA STAFF_NEW;
SET SSN2.STAFF;
LABEL LAST_NAME = 'LAST NAME OF EMPLOYEE'
      FIRST_NAME= 'FIRST NAME OF EMPLOYEE'
      EMP_CODE= 'UNIQUE EMPLOYEE CODE'
      JOBTITLE= 'DESIGNATION OF EMPLOYEE'
      DOJ= 'DATE OF JOINING FOR EMPLOYEE';
RUN;

PROC CONTENTS DATA=STAFF_NEW VARNUM;
RUN;

/* LABEL AS AN OPTION */
DATA STAFF_NEW (LABEL=(LAST_NAME = 'LAST NAME OF EMPLOYEE'
      FIRST_NAME= 'FIRST NAME OF EMPLOYEE'
      EMP_CODE= 'UNIQUE EMPLOYEE CODE'
      JOBTITLE= 'DESIGNATION OF EMPLOYEE'
      DOJ= 'DATE OF JOINING FOR EMPLOYEE'));
SET SSN2.STAFF;
RUN;

/* WE ARE NOT ALLOWED TO USE LABELS AS AN OPTION */
/* WHERE AS A STATEMENT AND AS AN OPTION */
===========================================

/* WHERE AS A STATEMENT */
DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY='APPOLO' AND GENDER='Female';
RUN;

/* WHERE COMPANY='APPOLO' AND GENDER='Female'; */

/* OPERAND - COMPANY, GENDER */
/* OPERATOR - =, AND */
/* CONDITIONAL VALUE - 'APPOLO', 'Female' */

/* WHERE AS AN OPTION WITH DATA STATEMENT */
DATA MED_ALL (WHERE=(COMPANY='APPOLO' AND GENDER='Female'));
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
RUN;

/* WHERE AS AN OPTION WITH SET STATEMENT */
DATA MED_ALL;
SET SSN2.MED_2024 (WHERE=(COMPANY='APPOLO' AND GENDER='Female'));
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
RUN;


/* WHERE AS A STATEMENT WITH OPERATORS AND OPERANDS */
========================================================

/* THERE ARE 4 TYPES OF OPERATORS */
/* 1. LOGICAL OPERATOR - AND, OR, NOT IN, IN */
/* 2. COMPARISION OPERATOR - >, <, >=, <=, =, <>, GT, GE, LT, LE, EQ, NE */
/* 3. SPECIAL OPERATORS - LIKE, BETWEEN */
/* 4. ARITHMETIC - +, -., *, / */

/* 1. LOGICAL OPERATORS */

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY='APPOLO' AND GENDER='Female';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY='APPOLO' OR GENDER='Female';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY IN ('APPOLO', 'GSK', 'GENO') AND GENDER='Female';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY NOT IN ('APPOLO', 'GSK', 'GENO') AND GENDER='Female';
RUN;

/* 2. COMPARISION OPERATOR */
DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
```

```
WHERE COMPANY EQ 'APPOLO';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY NE 'APPOLO';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE COMPANY EQ 'APPOLO' AND SPENT_AMOUNT GE 1000;
RUN;

/* 3. SPECIAL OPERATORS */

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE STATE_CODE SPENT_AMOUNT;
WHERE AGE BETWEEN 30 AND 50;
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE TOWN STATE_CODE SPENT_AMOUNT;
WHERE TOWN LIKE 'K%';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE TOWN STATE_CODE SPENT_AMOUNT;
WHERE TOWN LIKE '%K%';
RUN;

DATA MED_ALL;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY GENDER AGE TOWN STATE_CODE SPENT_AMOUNT;
WHERE TOWN LIKE 'K_____';
RUN;

/* 4. ARITHMETIC OPERATOR */

DATA SALES_ALL;
INPUT PROD $ VALUE1 VALUE2;
ADDITION=VALUE1 + VALUE2;
SUBTRACTION=VALUE1-VALUE2;
MULTIPLICATION=VALUE1*VALUE2;
DIVISION=VALUE1/VALUE2;
CARDS;
APPLE 100 300
DELL 300 400
HP 200 800
LENOVO 800 100
;
RUN;

PROC PRINT;
RUN;

/* HOW TO SORT DATASETS IN SAS */
=====================================

DATA STU_NAME;
INPUT NAME $20.;
CARDS;
AYASHKANT
ASHOK
ROHIT
```

```
DEEPAK
BALA
SOUMYA
RAJAT
;
RUN;

PROC PRINT DATA=STU_NAME;
RUN;

PROC SORT DATA=STU_NAME;
BY NAME;
RUN;

PROC SORT DATA=STU_NAME;
BY DESCENDING NAME;
RUN;

/* EXAMPLE - 1 */
DATA STU_SCORE;
INPUT NAME : $20. SCORE;
CARDS;
ASHOK 45
ROHIT 90
DEEPAK 23
ABID 56
SOUMYA 78
RAJAT 50
BALA 80
;
RUN;

PROC PRINT DATA=STU_SCORE;
RUN;

PROC SORT DATA=STU_SCORE;
BY SCORE;
RUN;

PROC SORT DATA=STU_SCORE;
BY DESCENDING SCORE;
RUN;

/* EXAMPLE-2 */
OPTIONS VALIDVARNAME=V7;
PROC IMPORT OUT=SSN2.PROD_SALES
            DATAFILE='/home/debendra330/BATCH_202404/SESSION_2/A1.RAW_DATA/a3.SORT_DATA.xlsx'
            DBMS=XLSX REPLACE;
            SHEET='DATA';
RUN;

PROC PRINT DATA=SSN2.PROD_SALES;
RUN;

/* GET PRODUCT, CITY AND YEAR WISE SALES */

PROC SORT DATA=SSN2.PROD_SALES;
BY PROD CITY YEAR;
RUN;

PROC PRINT;
RUN;

/* GET PRODUCT AND YEAR-WISE SALES AMOUNT IN DESCENDING */

PROC SORT DATA=SSN2.PROD_SALES;
BY PROD YEAR DESCENDING SALES;
RUN;
```

```
PROC PRINT;
RUN;

/* GET CITY AND YEAR-WISE SALES AMOUNT IN DESCENDING */

PROC SORT DATA=SSN2.PROD_SALES;
BY CITY YEAR DESCENDING SALES;
RUN;

PROC PRINT;
RUN;

/* HOW TO COPY A SORTED DATASET TO ANOTHER DATASET */

PROC SORT DATA=SSN2.PROD_SALES OUT=PROD_SALES_V1;
BY CITY YEAR DESCENDING SALES;
RUN;

PROC PRINT DATA=PROD_SALES_V1;
RUN;

/* MASTER DATASET =  SSN2.PROD_SALES */
/* COPY DATASET WITH SORTING = PROD_SALES_V1 */

/* EXAMPLE-1 */

PROC PRINT DATA=SSN2.STAFF;
RUN;

/* SORT THIS DATASET BY JOBTITLE AND DESCENDING SALARY.
SAVE THE SORTED DATASET IN ANOTHER DATASET */

PROC SORT DATA=SSN2.STAFF OUT=STAFF_NEW_V1;
BY JOBTITLE DESCENDING SALARY;
RUN;

PROC PRINT DATA=STAFF_NEW_V1;
RUN;

/* WE CAN ALSO USE PROC SORT TO REMOVE DUPLICATES IN A DATASET */
===================================================================

DATA STU_SCORE;
INFILE CARDS DLM='09'X;
INPUT STU_NAME $ APPLICATION : $15. COMPANY : $15. SCORE;
CARDS;
HARSHA  SAS INFOSYS 111
HARSHA  PYTHON  INFOSYS 388
HARSHA  ML  INFOSYS 392
HARSHA  ML  INFOSYS 392
SANJAY  SAS INFOSYS 481
SANJAY  PYTHON  INFOSYS 814
SANJAY  ML  INFOSYS 175
SANJAY  VISUALIZATION   INFOSYS 760
PREETHI SAS INFOSYS 785
PREETHI PYTHON  INFOSYS 474
PREETHI PYTHON  INFOSYS 474
PREETHI VISUALIZATION   INFOSYS 599
HARSHA  SAS WIPRO   618
HARSHA  SAS WIPRO   367
HARSHA  ML  WIPRO   531
HARSHA  VISUALIZATION   WIPRO   688
SANJAY  SAS WIPRO   637
SANJAY  PYTHON  WIPRO   125
SANJAY  ML  WIPRO   658
SANJAY  VISUALIZATION   WIPRO   840
PREETHI SAS WIPRO   298
PREETHI PYTHON  WIPRO   129
PREETHI VISUALIZATION   WIPRO   579
PREETHI VISUALIZATION   WIPRO   578
;
RUN;

PROC PRINT DATA=STU_SCORE;
RUN;

PROC SORT DATA=STU_SCORE;
BY STU_NAME APPLICATION COMPANY;
RUN;

DATA STU_SCORE_V1;
SET STU_SCORE;
RUN;

PROC SORT DATA=STU_SCORE_V1 NODUPKEY DUPOUT=STU_SCORE_V2;
BY STU_NAME;
RUN;

/* NODUPKEY DOES NTO CONSIDER THE CORRESPONDING COLUMNS WHILE CHECKING FOR DUPLICATES */

DATA STU_SCORE_V1;
SET STU_SCORE;
RUN;

PROC PRINT;
RUN;

PROC SORT DATA=STU_SCORE_V1 NODUP DUPOUT=STU_SCORE_V2;
BY STU_NAME;
RUN;

/* NODUP CONSIDERS ALL CORRESPONDING COLUMNS WHILE REMOVING DUPLICATES */

/* INTERVIEW QUESTION */
/* HOW CAN YOU USE NODUPKEY TO ENSURE ALL CORRESPONDING COLUMNS ARE CHECKED */

DATA STU_SCORE_V1;
SET STU_SCORE;
RUN;

PROC SORT DATA=STU_SCORE_V1 NODUPKEY DUPOUT=STU_SCORE_V2;
BY STU_NAME APPLICATION COMPANY;
RUN;

/* THERE IS A PROC SORT REMOVE DUPLICATE DATASET IN YOUR RAW FOLDER */
/* TRY IT OUT */

/* WHAT IS LIST REPORT */
====================================

PROC PRINT DATA=SSN2.STAFF;
RUN;

/* TO PRINT 1ST 10 OBS */
PROC PRINT DATA=SSN2.STAFF (OBS=10);
RUN;

/* TO PRINT FROM 5TH RECORD TO 10TH RECORD */
PROC PRINT DATA=SSN2.STAFF (FIRSTOBS=5 OBS=10);
RUN;

/* TO PRINT ONLY THE 10TH RECORD */
PROC PRINT DATA=SSN2.STAFF (FIRSTOBS=10 OBS=10);
RUN;

/* TO APPLY A FORMAT IN SALARY */
PROC PRINT DATA=SSN2.STAFF;
FORMAT SALARY DOLLAR15.;
```

```
RUN;

/* IN  PROC PRINT KEEP IS NOT ALLOWED. IT IS ALLOWED ONLY IN DATA STATEMENT */

/* TO PRINT SELECTED VARIABLES IN PROC PRINT, WE USE VAR */

PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
FORMAT SALARY DOLLAR15.;
RUN;

PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
RUN;

PROC SORT DATA=SSN2.STAFF;
BY JOBTITLE;
RUN;

PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
BY JOBTITLE;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
RUN;

PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
BY JOBTITLE;
ID JOBTITLE;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
RUN;

PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
BY JOBTITLE;
ID JOBTITLE;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
TITLE 'EMPLOYEE SALARY REPORT';
FOOTNOTE 'DATA AS OF MAR 31ST';
RUN;

/* 1. VAR - TO KEEP ONLY SELECTED COLUMNS IN RESULTS WINDOW */
/* 2. BY - TO GROUP THE DATA INTO VARIOUS PARTS */
/* 3. ID - TO REPLACE NO OF OBS, AND SHOW GROUP NAME */
/* 4. FORMAT - TO ASSIGN CORRECT FORMAT TO DATA */
/* 5. SUM - TO SHOW SUMMATION OF THE GROUP IN THE OUTPUT */
/* 6. TITLE AND FOOTNOTE - TO ADD HEADER AND FOOTER IN OUTPUT */

/* WHAT IS ODS */
==================================

/* ODS- OUTPUT DELIVERY SYSTEM */

ODS PDF FILE='/home/debendra330/BATCH_202404/SESSION_2/A4.SAS_OUTPUT/EMPLOYEE_SALARY_REPORT.pdf';
PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
BY JOBTITLE;
ID JOBTITLE;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
TITLE 'EMPLOYEE SALARY REPORT';
FOOTNOTE 'DATA AS OF MAR 31ST';
RUN;
ODS PDF CLOSE;
ODS RTF FILE='/home/debendra330/BATCH_202404/SESSION_2/A4.SAS_OUTPUT/EMPLOYEE_SALARY_REPORT.rtf';
PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
BY JOBTITLE;
ID JOBTITLE;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
TITLE 'EMPLOYEE SALARY REPORT';
FOOTNOTE 'DATA AS OF MAR 31ST';
RUN;
ODS RTF CLOSE;

ODS HTML FILE='/home/debendra330/BATCH_202404/SESSION_2/A4.SAS_OUTPUT/EMPLOYEE_SALARY_REPORT.html';
PROC PRINT DATA=SSN2.STAFF;
VAR LAST_NAME FIRST_NAME JOBTITLE SALARY;
BY JOBTITLE;
ID JOBTITLE;
FORMAT SALARY DOLLAR15.;
SUM SALARY;
TITLE 'EMPLOYEE SALARY REPORT';
FOOTNOTE 'DATA AS OF MAR 31ST';
RUN;
ODS HTML CLOSE;

/* IF THEN STATEMENT AND IF THEN DO */
==============================================

PROC PRINT DATA= SSN2.MED_2024 (OBS=10);
RUN;

DATA MED_SELECT;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY AGE GENDER STATE_CODE NO_OF_TRIPS SPENT_AMOUNT;
RUN;

/* AGE BUCKET */

/* IF AGE >= 60 THEN 'OLD-AGE' */
/* IF AGE >= 50 THEN 'MID-OLD-AGE' */
/* IF AGE >= 40 THEN 'MID-AGE' */
/* IF AGE >= 30 THEN 'MID-YOUNG-AGE' */
/* ELSE 'YOUNG' */

DATA MED_SELECT;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY AGE GENDER STATE_CODE NO_OF_TRIPS SPENT_AMOUNT AGE_BUCKET;
LENGTH AGE_BUCKET $20.;
IF AGE >=60 THEN AGE_BUCKET='OLD-AGE';
ELSE IF AGE >= 50 THEN AGE_BUCKET='MID-OLD-AGE';
ELSE IF AGE >= 40 THEN AGE_BUCKET= 'MID-AGE';
ELSE IF AGE>= 30 THEN AGE_BUCKET= 'MID-YOUNG-AGE';
ELSE AGE_BUCKET='YOUNG';
RUN;

/* VISIT BUCKET */

/* IF NO_OF_TRIPS >=30 THEN 'LOYAL' */
/* IF NO_OF_TRIPS >=10 THEN 'REGULAR' */
/* ELSE 'CASUAL' */

DATA MED_SELECT;
SET SSN2.MED_2024;
KEEP CUSTOMER_ID COMPANY AGE GENDER STATE_CODE NO_OF_TRIPS SPENT_AMOUNT VISIT_BUCKET;
LENGTH VISIT_BUCKET $20.;
IF NO_OF_TRIPS >= 30 THEN VISIT_BUCKET = 'LOYAL';
ELSE IF NO_OF_TRIPS >=10 THEN VISIT_BUCKET ='REGULAR';
ELSE VISIT_BUCKET='CASUAL';
RUN;
```

```
/* IF THEN DO STATEMENT */
=============================
/* EXAMPLE-1 */
DATA MOBILE_USAGE;
INPUT MOBILE PLAN $ LOCAL_MOU STD_MOU ISD_MOU;
CARDS;
9669804070 PPS60 1000 200 10
9634528913 PPS30 1200 500 100
8114413387 PPM30 1000 500 300
;
RUN;

/* PLAN BENEFITS */
/* PPS60 - LOCAL/STD .60 PER MINUTE AND 3 PER ISD MINUTE */
/* PPS30 - LOCAL/STD .30 PER MINUTE AND 5 PER ISD MINUTE */
/* PPM30 - LOCAL/STD .30 PER MINUTE AND 2 PER ISD MINUTE */

DATA MOBILE_USAGE_V1;
SET MOBILE_USAGE;
/* PPS60 */
IF PLAN='PPS60' THEN DO;
LOCAL_REV = LOCAL_MOU*0.6;
STD_REV = STD_MOU*0.6;
ISD_REV= ISD_MOU*3;
END;
/* PPS60 */
IF PLAN='PPS30' THEN DO;
LOCAL_REV = LOCAL_MOU*0.3;
STD_REV = STD_MOU*0.3;
ISD_REV= ISD_MOU*5;
END;
/* PPM30 */
IF PLAN='PPM30' THEN DO;
LOCAL_REV = LOCAL_MOU*0.3;
STD_REV = STD_MOU*0.3;
ISD_REV= ISD_MOU*2;
END;

TOTAL_MOU = LOCAL_MOU + STD_MOU + ISD_MOU;
TOTAL_REV = LOCAL_REV + STD_REV + ISD_REV;
RUN;


/* EXAMPLE-2 */

DATA PROD_SALES;
INFILE CARDS DLM='09'X;
INPUT PRODUCT $ CITY : $15. PRICE UNITS;
CARDS;
APPLE   BANGALORE   36000   838
APPLE   DELHI   49000   836
APPLE   BHUBANESWAR 44000   555
APPLE   MUMBAI  32000   841
APPLE   CHENNAI 38000   767
DELL    BANGALORE   49000   535
DELL    DELHI   35000   183
DELL    BHUBANESWAR 48000   729
DELL    MUMBAI  45000   557
DELL    CHENNAI 31000   490
HP  BANGALORE   43000   596
HP  DELHI   33000   136
HP  BHUBANESWAR 48000   691
HP  MUMBAI  39000   309
HP  CHENNAI 48000   312
;
RUN;

/* CONDITION FOR DISCOUNT */
/* IF PRODUCT='APPLE' AND CITY='BANGALORE' THEN .30*PRICE; */
/* IF PRODUCT='APPLE' AND CITY='MUMBAI' THEN .20*PRICE; */
/* IF PRODUCT='DELL' AND CITY='BHUBANESWAR' THEN .30*PRICE; */
/* IF PRODUCT='DELL' AND CITY='DELHI' THEN .25*PRICE; */
/* IF PRODUCT='HP' AND CITY='CHENNAI' THEN .10*PRICE; */
/* IF PRODUCT='HP' AND CITY='MUMBAI' THEN .20*PRICE; */
```

```
DATA PROD_SALES_V1;
SET PROD_SALES;

IF PRODUCT='APPLE' THEN DO;
            IF CITY='BANGALORE' THEN DISCOUNT=0.3*PRICE;
            ELSE IF CITY='MUMBAI' THEN DISCOUNT = 0.2*PRICE;
            ELSE DISCOUNT=0;
END;
ELSE IF PRODUCT='DELL' THEN DO;
            IF CITY='BHUBANESWAR' THEN DISCOUNT=0.3*PRICE;
            ELSE IF CITY='DELHI' THEN DISCOUNT=0.25*PRICE;
            ELSE DISCOUNT=0;
END;
ELSE IF PRODUCT='HP' THEN DO;
            IF CITY='CHENNAI' THEN DISCOUNT=0.1*PRICE;
            ELSE IF CITY='MUMBAI' THEN DISCOUNT=0.2*PRICE;
            ELSE DISCOUNT=0;
END;

NEW_SALES_PRICE = PRICE - DISCOUNT;
TOTAL_SALES_REV = UNITS*NEW_SALES_PRICE;
RUN;

/* HOW TO CREATE MULTIPLE DATASET FROM AN EXISTING DATASET */
==========================================================
```

```
PROC PRINT DATA=SSN2.STAFF;
RUN;
```

```
DATA STAFF_PILOT STAFF_MECHANIC;
SET SSN2.STAFF;
IF JOBTITLE='Mechanic' THEN OUTPUT STAFF_MECHANIC;
ELSE IF JOBTITLE='Pilot' THEN OUTPUT STAFF_PILOT;
RUN;

/* TEST */

/* I WANT TO CREATE DATASET FOR ALL COMPANIES IN MY MED_2024 DATA */
```

```
DATA MED_APPOLO MED_CIPLA MED_GENO MED_RELEGARE MED_OTHERS;
SET SSN2.MED_2024;

IF COMPANY='APPOLO' THEN OUTPUT MED_APPOLO;
ELSE IF COMPANY ='CIPLA' THEN OUTPUT MED_CIPLA;
ELSE IF COMPANY ='GENO' THEN OUTPUT MED_GENO;
ELSE IF COMPANY ='RELEGARE' THEN OUTPUT MED_RELEGARE;
ELSE OUTPUT MED_OTHERS;
RUN;

/* WHAT IS SAS FORMAT HOW TO CREATE YOUT OWN FORMATS */
=========================================================================
```

```
DATA STU_SCORE;
INPUT STU_NAME $ SCORE;
CARDS;
A 30
B 44
C 55
D 90
;
RUN;
```

```
PROC FORMAT;
VALUE $NAME 'A'='AYASHKANT'
            'B'='BHAVESH'
            'C'='CAROLINE'
            'D'='DEEPAK';
RUN;
```

```
DATA STU_SCORE_V1;
SET STU_SCORE;
FORMAT STU_NAME $NAME.;
RUN;
```

```
PROC FORMAT;
VALUE GRADE 1-33 ='FAIL'
            34-50 ='3RD'
            51-60 ='2ND'
            61-100='1ST';
RUN;
```