Math 338 Name: Nhi Vu Kafai – HW 4

Data set EMPLOY contains: ID (employee number), GENDER, and DOB (date of birth).

Data set PARTS contains: PART_NO and PRICE.

Data set SALES contains: ID (employee number), TRANS (transaction number), PART_NO, and QUANTITY (for each sales call completed).

Write a SAS program to read the data sets and

- a. A listing, sorted by ID, showing ID, the transaction number, and the total sale for each transaction.
- b. A summary showing the total sale for each employee.
- c. A summary showing the total company sales for each GENDER.

EMPLOY

ID	GENDER	DOB
01	F	10/21/46
02	F	09/02/44
03	M	04/23/55
04	F	11/11/38

PARTS

PART_NO	PRICE
123	15
234	25
237	20
355	28
789	55

SALES

ID	TRANS	PART_NO	QUANTITY
03	1	234	5
03	1	123	9
03	2	237	4
01	1	355	5
01	1	234	3
01	1	123	9
01	2	355	5
02	1	237	11

(**Note**: data set employ is already sorted in ID order and data set parts is already sorted in PART NO order.)

```
options nodate nonumber LINESIZE=70;
/***READ ALL THE DATA SETS****/
data employ;
infile
'\\Client\C$\Users\nhivutu\Desktop\Math338\data\dataEMPLOY.txt';
informat DOB MMDDYY10.;
input ID Gender $1. DOB;
run;
data parts;
infile
'\\Client\C$\Users\nhivutu\Desktop\Math338\data\dataParts.txt';
input PART NO PRICE;
run;
data sale;
infile
'\\Client\C$\Users\nhivutu\Desktop\Math338\data\dataSALE.txt';
input ID TRANS PART NO QUANTITY;
proc sort data=sale;
by PART NO;
run;
/***CALCULATE THE TOTAL SALE***/
data TotalSale;
merge parts sale (in=s);
by PART NO;
TOTAL= QUANTITY*PRICE;
informat TOTAL dollar22.2;
if s=1 then output;
run;
```

```
/****PART A - MAKE A LISTING SORTED BY ID****/
proc sort data=TotalSale;
by ID;
run;

data List;
merge TotalSale(in=t) employ;
if t=0 then TOTAL=0;
by ID;
run;

/***PRINT A LIST ***/
proc print data=List;
var ID TRANS TOTAL;
format TOTAL dollar22.2;
title "A list of total sales";
run;
```

A list of total sales

Obs	ID	TRANS	TOTAL
1	1	1	\$135.00
2	1	1	\$75.00
3	1	1	\$140.00
4	1	2	\$140.00
5	2	1	\$220.00
6	3	1	\$135.00
7	3	1	\$125.00
8	3	2	\$80.00
9	4	•	\$0.00

```
/***The total sale for each transaction.***/
proc means data= List sum;
title "The total sale for each transaction. ";
class TRANS;
var TOTAL;
run;
```

The total sale for each transaction.

The MEANS Procedure

Analysis Variable : TOTAL

TRANS	N Obs	Sum
 1	6	830.0000000
 2	2	220.0000000

```
/****PART B****/
proc means data= List sum;
title " Summary of the total sale for each employee";
class ID;
var TOTAL;
run;
```


Analysis Variable : TOTAL

ID	N Obs	Sum
1	4	490.0000000
2	1	220.0000000
3	3	340.0000000
4	1	0

```
/****PART C****/
proc means data= List sum;
title " Summary of the total sale for each gender";
class GENDER;
var TOTAL;
run;
quit;
```


Analysis Variable : TOTAL

Gender	N Obs	Sum
F	6	710.0000000
M 	3	340.0000000