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

1. A listing, sorted by ID, showing ID, the transaction number, and the total sale for each transaction.
2. A summary showing the total sale for each employee.
3. 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

N

TRANS 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**;

Summary of the total sale for each employee

The MEANS Procedure

Analysis Variable : TOTAL

N

ID Obs Sum

--------------------------------

1 4 490.0000000

2 1 220.0000000

3 3 340.0000000

4 1 0

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/\*\*\*\*PART C\*\*\*\*/

**proc** **means** data= List sum;

title " Summary of the total sale for each gender";

class GENDER;

var TOTAL;

**run**;

**quit**;

Summary of the total sale for each gender

The MEANS Procedure

Analysis Variable : TOTAL

N

Gender Obs Sum

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F 6 710.0000000

M 3 340.0000000

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