### STAT 440 Homework 8 April 5, 2016 Exercise 1 (b)

Data portion of discount\_ret

| Obs | Customer ID | Customer Name     | Total<br>Sales |
|-----|-------------|-------------------|----------------|
| 1   | 89          | Wynella Lewis     | \$964.80       |
| 2   | 10          | Karen Ballinger   | \$463.20       |
| 3   | 45          | Dianne Patchin    | \$569.60       |
| 4   | 92          | Lendon Celii      | \$481.50       |
| 5   | 5           | Sandrina Stephano | \$253.60       |
| 6   | 31          | Cynthia Martinez  | \$390.00       |
| 7   | 10          | Karen Ballinger   | \$504.40       |
| 8   | 10          | Karen Ballinger   | \$268.00       |
| 9   | 10          | Karen Ballinger   | \$768.60       |
| 10  | 10          | Karen Ballinger   | \$597.60       |
| 11  | 89          | Wynella Lewis     | \$251.80       |
| 12  | 10          | Karen Ballinger   | \$321.50       |
| 13  | 10          | Karen Ballinger   | \$2,132.80     |
| 14  | 10          | Karen Ballinger   | \$1,884.80     |
| 15  | 45          | Dianne Patchin    | \$252.00       |
| 16  | 45          | Dianne Patchin    | \$590.00       |
| 17  | 31          | Cynthia Martinez  | \$2,282.40     |
| 18  | 10          | Karen Ballinger   | \$285.30       |
| 19  | 89          | Wynella Lewis     | \$300.80       |

Data portion of discount\_cat

# STAT 440 Homework 8 April 5, 2016 Exercise 1 (b)

| Obs | Customer ID | Customer Name | Customer<br>Gender | Total<br>Sales |
|-----|-------------|---------------|--------------------|----------------|
| 1   | 90          | Kyndal Hooks  | F                  | \$192.40       |
| 2   | 89          | Wynella Lewis | F                  | \$269.20       |
| 3   | 90          | Kyndal Hooks  | F                  | \$220.40       |

Data portion of discount\_int

## STAT 440 Homework 8 April 5, 2016 Exercise 1 (b)

| Obs | Customer ID | Customer Name     | Customer<br>Birth Date | Total<br>Sales |
|-----|-------------|-------------------|------------------------|----------------|
| 1   | 24          | Robyn Klem        | 02JUN1959              | \$391.20       |
| 2   | 27          | Cynthia Mccluney  | 15APR1969              | \$348.80       |
| 3   | 27          | Cynthia Mccluney  | 15APR1969              | \$422.10       |
| 4   | 5           | Sandrina Stephano | 09JUL1979              | \$893.20       |
| 5   | 27          | Cynthia Mccluney  | 15APR1969              | \$183.20       |
| 6   | 34          | Alvan Goheen      | 18JAN1984              | \$1,197.50     |
| 7   | 34          | Alvan Goheen      | 18JAN1984              | \$806.00       |
| 8   | 31          | Cynthia Martinez  | 07AUG1959              | \$555.20       |
| 9   | 31          | Cynthia Martinez  | 07AUG1959              | \$240.80       |
| 10  | 24          | Robyn Klem        | 02JUN1959              | \$140.40       |
| 11  | 27          | Cynthia Mccluney  | 15APR1969              | \$1,210.50     |
| 12  | 27          | Cynthia Mccluney  | 15APR1969              | \$156.80       |

### STAT 440 Homework 8 April 5, 2016 Exercise 2 (b)

| Begin_Date | Export      | Import      | Balance     |
|------------|-------------|-------------|-------------|
| 1/1/1987   | \$17,345.90 | \$30,798.50 | \$-13452.60 |
| 2/1/1987   | \$18,853.90 | \$29,810.30 | \$-10956.40 |
| 3/1/1987   | \$21,835.50 | \$32,464.30 | \$-10628.80 |
| 4/1/1987   | \$20,677.70 | \$32,291.10 | \$-11613.40 |
| 5/1/1987   | \$20,759.50 | \$33,170.00 | \$-12410.50 |
| 6/1/1987   | \$21,636.70 | \$35,358.00 | \$-13721.30 |
| 7/1/1987   | \$21,379.00 | \$35,809.90 | \$-14430.90 |
| 8/1/1987   | \$20,079.10 | \$33,826.20 | \$-13747.10 |
| 9/1/1987   | \$21,183.70 | \$33,667.50 | \$-12483.80 |
| 10/1/1987  | \$22,777.80 | \$38,075.60 | \$-15297.80 |
| 11/1/1987  | \$23,278.70 | \$35,210.90 | \$-11932.20 |
| 12/1/1987  | \$24,314.40 | \$35,758.70 | \$-11444.30 |
| 1/1/1988   | \$23,161.60 | \$33,035.40 | \$-9,873.80 |
| 2/1/1988   | \$24,315.60 | \$35,494.10 | \$-11178.50 |
| 3/1/1988   | \$29,342.80 | \$36,998.70 | \$-7,655.90 |
| 1/1/1990   | \$30,664.10 | \$40,303.80 | \$-9,639.70 |
| 3/1/1990   | \$35,970.60 | \$42,339.30 | \$-6,368.70 |
| 3/1/1993   | \$41,998.50 | \$50,744.60 | \$-8,746.10 |
| 3/1/1996   | \$54,951.70 | \$63,363.30 | \$-8,411.60 |
| 3/1/1999   | \$60,889.40 | \$84,071.90 | \$-23182.50 |
| 2/1/1990   | \$30,961.80 | \$37,111.90 | \$-6,150.10 |
| 4/1/1990   | \$32,617.10 | \$39,143.90 | \$-6,526.80 |
| 4/1/1993   | \$39,420.50 | \$47,850.10 | \$-8,429.60 |
| 4/1/1996   | \$51,871.80 | \$64,663.40 | \$-12791.60 |

### STAT 440 Homework 8 April 5, 2016 Exercise 2 (d)

#### The CONTENTS Procedure

| Data Set Name       | WORK.YEARLYIMPORTS_KEFUZHU2 | Observations         | 29 |
|---------------------|-----------------------------|----------------------|----|
| Member Type         | DATA                        | Variables            | 3  |
| Engine              | V9                          | Indexes              | 0  |
| Created             | 04/05/2016 19:33:02         | Observation Length   | 72 |
| Last Modified       | 04/05/2016 19:33:02         | Deleted Observations | 0  |
| Protection          |                             | Compressed           | NO |
| Data Set Type       |                             | Sorted               | NO |
| Label               |                             |                      |    |
| Data Representation | WINDOWS_64                  |                      |    |
| Encoding            | wlatin1 Western (Windows)   |                      |    |

| Engine/Host Dependent Information |  |  |
|-----------------------------------|--|--|
| Data Set Page Size                | 65536  |  |
| Number of Data Set Pages          | 1  |  |
| First Data Page                   | 1  |  |
| Max Obs per Page                  | 908  |  |
| Obs in First Data Page            | 29   |  |
| Number of Data Set Repairs        | 0  |  |
| ExtendObsCounter                  | YES  |  |
| Filename                          | C:\Users\kefuzhu2\AppData\Local\Temp\SAS Temporary Files\_TD1900_ICS-ENG-PC15_\yearlyimports_kefuzhu2.sas7bdat |  |
| Release Created                   | 9.0401M3   |  |
| Host Created                      | X64_7PRO   |  |

| Alp | Alphabetic List of Variables and Attributes |      |    |  |
|-----|---|------|----|--|
| #   | # Variable Type Len                         |      |    |  |
| 1   | Year  | Char | 50 |  |
| 3   | YearAvg                                     | Num  | 8  |  |
| 2   | YearTotal                                   | Num  | 8  |  |

## STAT 440 Homework 8 April 5, 2016 Exercise 2 (e)

| Obs | Year | YearTotal | YearAvg   |
|-----|------|-----------|-----------|
| 1   | 1987 | 406241.0  | 33853.42  |
| 2   | 1988 | 440952.3  | 36746.03  |
| 3   | 1989 | 473210.9  | 39434.24  |
| 4   | 1990 | 495310.6  | 41275.88  |
| 5   | 1991 | 488453.1  | 40704.43  |
| 6   | 1992 | 532661.7  | 44388.48  |
| 7   | 1993 | 580656.2  | 48388.02  |
| 8   | 1994 | 663251.8  | 55270.98  |
| 9   | 1995 | 743545.0  | 61962.08  |
| 10  | 1996 | 795286.6  | 66273.88  |
| 11  | 1997 | 869703.0  | 72475.25  |
| 12  | 1998 | 911896.7  | 75991.39  |
| 13  | 1999 | 1024615.5 | 85384.63  |
| 14  | 2000 | 1218022.6 | 101501.88 |
| 15  | 2001 | 1140998.1 | 95083.18  |
| 16  | 2002 | 1161366.4 | 96780.53  |
| 17  | 2003 | 1257121.2 | 104760.10 |
| 18  | 2004 | 1469705.0 | 122475.42 |
| 19  | 2005 | 1673454.0 | 139454.50 |
| 20  | 2006 | 1853938.0 | 154494.83 |
| 21  | 2007 | 1956961.0 | 163080.08 |
| 22  | 2008 | 2103640.8 | 175303.40 |
| 23  | 2009 | 1559624.9 | 129968.74 |
| 24  | 2010 | 1913160.2 | 159430.02 |
| 25  | 2011 | 2207823.8 | 183985.32 |
| 26  | 2012 | 2275150.0 | 189595.83 |
| 27  | 2013 | 2268321.3 | 189026.78 |
| 28  | 2014 | 2344773.9 | 195397.83 |
| 29  | 2015 | 2240932.6 | 186744.38 |

# STAT 440 Homework 8 April 5, 2016 Exercise 2 (f)

| Obs | Decade | DecadeAvg  |
|-----|--------|------------|
| 1   | 00's   | 1539483.20 |
| 2   | 10's   | 2208360.30 |
| 3   | 80's   | 440134.73  |
| 4   | 90's   | 710538.02  |