
STAT 480: Homework 5

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PROBLEM 1

Below is the output from my SAS code in text and an image format.

1	Popular Books for Children				
2					
3				No. of	Price
4	Title	Author	Price	Pages	Per Page
5					
6	An Egg is Quiet	Aston, Dianna Hutts	\$11.55	36	\$0.32
7					
8	Corduroy	Freeman, Don	\$11.55	28	\$0.41
9					
10	Snowflake Bentley	Martin, Jacqueline	\$10.88	32	\$0.34
11					
12	Bear Snores On	Wilson, Karma	\$10.72	32	\$0.34
13					
14	The Kissing Hand	Penn, Audrey	\$9.95	32	\$0.31
15					
16			=====		
17					
18			\$54.65		
19					
20					
21			Publication		
22	Title	Publisher	Date		
23					
24	An Egg is Quiet	Chronicle Books	02MAR2006		
25					
26	Corduroy	Viking Juvenile	11MAR1968		
27					
28	Snowflake Bentley	Houghton Mifflin	28SEP1998		
29					
30	Bear Snores On	Simon & Schuster	07APR2003		
31					
32	The Kissing Hand	Tanglewood Press	25JUN2006		
33					
34					
35					
36					
37					
38	Price obtained from Amazon.com				

SAS

File Edit View Tools Solutions Window Help

Results

Print: Popular Books for Children

Output - (Untitled)

Popular Books for Children

Title	Author	Price	No. of Pages	Price Per Page
An Egg is Quiet	Aston, Dianna Hutts	\$11.55	36	\$0.32
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Title	Publisher	Publication Date
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Price obtained from Amazon.com

Window Log

Results Explorer

Output - (Untitled) Log - (Untitled) hw6

C:\Users\ksall\Documents\Git\PSU_Class_Projects\STAT_480\HW6

Output - (Untitled)

Popular Books for Children				
Title	Author	Price	No. of Pages	Price Per Page
An Egg is Quiet	Aston, Dianna Hutts	\$11.55	36	\$0.32
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		=====		
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Bear Snores On	Simon & Schuster	07APR2003		
The Kissing Hand	Tanglewood Press	25JUN2006		

Price obtained from Amazon.com

SAS CODE

```
1  /*****
2  Kyle Salitrik
3  kps168
4  PSU ID: 997543474
5  Sept 14, 2018
6
7  This program covers Homework 6 for STAT 480.
8  *****/
9
10 LIBNAME STAT480 'C:\STAT480\';
11
12 /*** PART A ***/
13 DATA books;
14     * Read data using formatted input from raw data file;
15     INFILE 'C:\STAT480\kidsbooks.txt';
16     INPUT
17         @1 Title          $20.
18         @22 Author        $19.
19         @43 Publisher     $16.
20         @61 Pubdate       mmddyy10.
21         @72 Price         5.2
22         @79 Pages         2.
23     ;
24
25     /* Calculate price per page for each book */
26     PricePerPage=Price/Pages;
27 RUN;
28
29 PROC SORT data=books out=sortedBooks;
30     by descending price;
31 RUN;
32
33 PROC PRINT data=sortedBooks SPLIT='/' DOUBLE;
34     /* Limit output width to 80 and center output */
35     OPTIONS LS=80 PS=38 NODATE NONUMBER;
36
37     /* Set title for observations */
38     id Title;
39
40     /* Select values to print out */
41     var Author Price Pages PricePerPage Publisher Pubdate;
42     where pricePerPage > 0.30;
43     sum Price;
44
45     /* Set Labels and output formats */
46     label
47         Title = 'Title'
48         Author = 'Author'
49         Price = 'Price'
50         Pages = 'No. of/Pages'
51         PricePerPage = 'Price/Per Page'
52         Publisher = 'Publisher'
53         Pubdate = 'Publication/Date';
54     format
55         Pubdate DATE9.
56         Price DOLLAR6.2
57         PricePerPage DOLLAR5.2;
58
59     /* Set title and footnote */
60     title 'Popular Books for Children';
61     footnote 'Price obtained from Amazon.com';
62 RUN;
```

SAS LOG FILE

```
1 1 /*****
2 2 Kyle Salitrik
3 3 kps168
4 4 PSU ID: 997543474
5 5 Sept 14, 2018
6 6
7 7 This program covers Homework 6 for STAT 480.
8 8 *****/
9 9
10 10 LIBNAME STAT480 'C:\STAT480\';
11 NOTE: Libref STAT480 was successfully assigned as follows:
12 Engine: V9
13 Physical Name: C:\STAT480
14 11
15 12 /*** PART A ***/
16 13 DATA books;
17 14 * Read data using formatted input from raw data file;
18 15 INFILE 'C:\STAT480\kidsbooks.txt';
19 16 INPUT
20 17 @1 Title $20.
21 18 @22 Author $19.
22 19 @43 Publisher $16.
23 20 @61 Pubdate mmddyy10.
24 21 @72 Price 5.2
25 22 @79 Pages 2.
26 23 ;
27 24
28 25 /* Calculate price per page for each book */
29 26 PricePerPage=Price/Pages;
30 27 RUN;
31
32 NOTE: The infile 'C:\STAT480\kidsbooks.txt' is:
33 Filename=C:\STAT480\kidsbooks.txt,
34 RECFM=V,LRECL=32767,File Size (bytes)=993,
35 Last Modified=06Oct2018:14:17:42,
36 Create Time=06Oct2018:14:12:58
37
38 NOTE: 23 records were read from the infile 'C:\STAT480\kidsbooks.txt'.
39 The minimum record length was 0.
40 The maximum record length was 80.
41 NOTE: SAS went to a new line when INPUT statement reached past the end of a line.
42 NOTE: The data set WORK.BOOKS has 12 observations and 7 variables.
43 NOTE: DATA statement used (Total process time):
44 real time 0.03 seconds
45 cpu time 0.03 seconds
46
47
48 28
49 29 PROC SORT data=books out=sortedBooks;
50 30 by descending price;
51 31 RUN;
52
53 NOTE: There were 12 observations read from the data set WORK.BOOKS.
54 NOTE: The data set WORK.SORTEDBOOKS has 12 observations and 7 variables.
55 NOTE: PROCEDURE SORT used (Total process time):
56 real time 0.01 seconds
57 cpu time 0.01 seconds
58
59
60 32
61 33 PROC PRINT data=sortedBooks SPLIT='/' DOUBLE;
62 34 /* Limit output width to 80 and center output */
63 35 OPTIONS LS=80 PS=38 NODATE NONUMBER;
64 36
```

```

65 37      /* Set title for observations */
66 38      id Title;
67 39
68 40      /* Select values to print out */
69 41      var Author Price Pages PricePerPage Publisher Pubdate;
70 42      where pricePerPage > 0.30;
71 43      sum Price;
72 44
73 45      /* Set Labels and output formats */
74 46      label
75 47          Title = 'Title '
76 48          Author = 'Author'
77 49          Price = 'Price '
78 50          Pages = 'No. of/Pages'
79 51          PricePerPage = 'Price/Per Page'
80 52          Publisher = 'Publisher'
81 53          Pubdate = 'Publication/Date';
82 54      format
83 55          Pubdate DATE9.
84 56          Price DOLLAR6.2
85 57          PricePerPage DOLLAR5.2;
86 58
87 59      /* Set title and footnote */
88 60      title 'Popular Books for Children';
89 61      footnote 'Price obtained from Amazon.com';
90 62      RUN;
91
92 NOTE: There were 5 observations read from the data set WORK.SORTEDBOOKS.
93      WHERE pricePerPage>0.3;
94 NOTE: PROCEDURE PRINT used (Total process time):
95      real time          0.05 seconds
96      cpu time           0.06 seconds

```