60/65=92.3

Intro to SAS HW Chapter 5

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HW Chapter 5 Q3

- 3. The Output Delivery System does which of the following?
 - a. It determines what the output will look like
 - b. It cannot be turned off
 - c. It does not belong to a DATA step or PROC step
 - d. All of the above
- D. All of the above

HW Chapter 5 Q4

- 4. To exclude procedure names from output, you use which statement?
 - a. ODS NOPROCNAME
 - b. ODS TITLEEXCLUDE
 - c. ODS NOPROCTITLE
 - d. None of the above
 - A. ODS NO PROCTITLE Answer is C

HW Chapter 5 Q5

- 5. When creating HTML output, which of the following options, along with the PATH option, will create a file that contains the results?
 - a. FILE=
 - b. BODY=
 - c. Both can be used
 - d. Neither can be used
- B. BODY=

Answer is C

HW Chapter 5 Q6

- 6. Which of the following is true about the ODS LISTING destination?
 - a. It creates high-resolution reports and graphics
 - b. It does not use a style for tabular output
 - c. It cannot send output to a file
 - d. All of the above
 - B. It does not use a style for tabular output

HW Chapter 5 Q15

- 15. A data set can be created using which of the following ODS statements?
 - a. TRACE
 - b. SELECT
 - c. EXCLUDE
 - d. OUTPUT
- D. OUTPUT

HW Chapter 5 Q16

- 16. Which ODS statement does not require you to specify an output object?
 - a. TRACE
 - b. SELECT
 - c. EXCLUDE
 - d. OUTPUT
 - A. TRACE

HW Chapter 5 Q22

"Describe why you might choose to use ODS SELECT over ODS EXCLUDE or vice versa." You might choose ODS SELECT over ODS EXCLUDE if there are only a few outputs you want to choose. Conversely, if most of your outputs are to be kept and you only want to eliminate a

few, then ODS EXCLUDE would be more appropriate. This eliminates the need of having to list out too many things, also eliminating the probability of errors.

HW Chapter 5 Q25

- 25. The SAS data set named CRAYONS contains information on standard Crayola crayon colors. The variables in this file are crayon number, color name, hexadecimal code, RGB triplet, pack size, year issued, and year retired.
 - a. Examine this SAS data set including the variable labels and attributes. Create a table showing counts by year of issue. Also create a report listing the color name, hexadecimal code, and year of issue for each crayon. Send these two reports to the default output destination.
 - b. Add code that will save the output in a text file.
 - c. Add code that will save the output in an HTML file.
 - d. Add code that will save the output in an RTF file.
 - e. Add code that will save the output in a PDF file.

COLUMN Color Hex Issued;

RUN:

ODS TRACE OFF;

```
OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
           /* 25 A */
           DATA CRAYONS:
71
             set '/home/u6/223361/Intro to SAS/HW5/crayons3.sas7bdat';
NOTE: Data file WC000001 [RAYONS3.DATA is in a format that is native to another host, or the file encoding does not match the session encoding. Cross Environment Data Access will be used, which might require additional CPU resources and might reduce
      performance.
           RUN;
NOTE: There were 133 observations read from the data set /home/u62223361/Intro to SAS/HW5/crayons3.sas7bdat.
NOTE: The data set WORK.CRAYONS has 133 observations and 7 variables.
NOTE: DATA statement used (Total process time):
      real time 0.00 seconds user cpu time 0.00 seconds
      system cpu time 0.00 seconds
                       1030.46k
22692.00k
      memory
      OS Memory
      Timestamp
                        03/14/2024 10:21:12 PM
      Step Count
                                       170 Switch Count 3
      Page Faults
Page Reclaims
                                        0
                                       211
      Page Swaps
      Voluntary Context Switches
Involuntary Context Switches
                                       22
      Block Input Operations
Block Output Operations
                                       264
74
75
                   PROC CONTENTS DATA = CRAYONS;
76
                   RUN;
NOTE: PROCEDURE CONTENTS used (Total process time):
          real time
                                               0.02 seconds
          user cpu time
                                               0.03 seconds
          system cpu time
                                               0.00 seconds
                                               1766.96k
          memory
                                               22952.00k
          OS Memory
          Timestamp
                                               03/14/2024 10:21:12 PM
          Step Count
                                                                        171 Switch Count 0
          Page Faults
                                                                        106
          Page Reclaims
          Page Swaps
                                                                        0
                                                                        2
          Voluntary Context Switches
          Involuntary Context Switches
                                                                        0
          Block Input Operations
                                                                        0
          Block Output Operations
                                                                        16
```

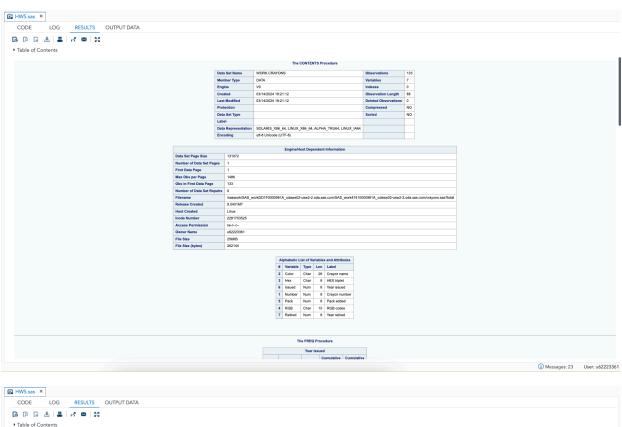
```
77
78
         ODS TRACE ON;
79
         PROC FREQ DATA = CRAYONS;
         TABLES Issued;
80
81
          RUN;
Output Added:
-----
Name:
        OneWayrrequencies
One-Way Frequencies
          OneWayFreqs
Label:
Template: Base.Freq.OneWayFreqs
          Freq.Table1.OneWayFreqs
Path:
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE FREQ used (Total process time):
     real time
                  0.01 seconds
     user cpu time 0.01 seconds system cpu time 0.00 seconds
     memory
                         1004.78k
     OS Memory
                       22952.00k
03/14/2024 10:21:12 PM
      Timestamp
      Step Count
                                        172 Switch Count 2
     Page Faults
     Page Reclaims
                                        127
     Page Swaps
                                        0
     Voluntary Context Switches
                                       16
      Involuntary Context Switches
                                       0
```

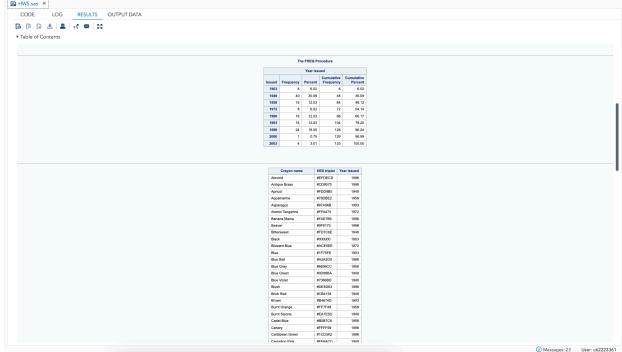
0

Block Input Operations

Block Output Operations 280

```
82
83
         PROC REPORT DATA = CRAYONS;
84
         COLUMN Color Hex Issued;
85
         RUN;
Output Added:
Name:
           Report
Label:
Data Name: ProcReportTable
Path: Report.Report.Report
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE REPORT used (Total process time):
     real time
                   0.05 seconds
     user cpu time 0.06 seconds system cpu time 0.01 seconds
     memory
                        7795.71k
     os Memory
                        29624.00k
                       03/14/2024 10:21:12 PM
     Timestamp
                                       173 Switch Count 1
     Step Count
     Page Faults
     Page Reclaims
                                       1731
     Page Swaps
     Voluntary Context Switches
                                      34
     Involuntary Context Switches
                                     0
     Block Input Operations
                                       0
     Block Output Operations
                                     16
86
          ODS TRACE OFF;
87
88
         OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
98
```





/* 25 B */

 $ODS\ LISTING\ FILE = '/home/u62223361/Intro\ to\ SAS/HW5/crayons 3.lst';$

PROC FREQ DATA = CRAYONS;

TABLES Issued;

RUN;
PROC REPORT DATA = CRAYONS;
COLUMN Color Hex Issued;
RUN;
ODS LISTING CLOSE;

```
OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
70
           /* 25 B */
          ODS LISTING FILE='/home/u62223361/Intro to SAS/HW5/crayons3.lst';
71
          PROC FREQ DATA = CRAYONS;
73
           TABLES Issued;
74
          RUN;
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: The PROCEDURE FREQ printed page 5.
NOTE: PROCEDURE FREQ used (Total process time):
     real time
                        0.01 seconds
                       0.02 seconds
     user cpu time
     system cpu time 0.00 seconds
     memory
                         1612.15k
     OS Memory
                         23720.00k
                        03/14/2024 10:23:49 PM
     Timestamp
     Step Count
                                       179 Switch Count 2
     Page Faults
     Page Reclaims
                                       207
     Page Swaps
                                        0
      Voluntary Context Switches
                                       12
     Involuntary Context Switches
                                       0
     Block Input Operations
                                       0
     Block Output Operations
                                       272
           PROC REPORT DATA = CRAYONS;
76
           COLUMN Color Hex Issued;
77
          RUN;
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: The PROCEDURE REPORT printed pages 6-8.
NOTE: PROCEDURE REPORT used (Total process time):
     real time
                         0.05 seconds
     user cpu time 0.05 seconds
system cpu time 0.00 seconds
     memory
                        7700.62k
     OS Memory
                        30648.00k
     Timestamp
                        03/14/2024 10:23:49 PM
                                       180 Switch Count 1
      Step Count
      Page Faults
     Page Reclaims
                                       1780
     Page Swaps
      Voluntary Context Switches
      Involuntary Context Switches
      Block Input Operations
                                       0
      Block Output Operations
                                       32
78
          ODS LISTING CLOSE;
79
          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
80
90
```



/* 25 C */

ODS HTML PATH='/home/u62223361/Intro to SAS/HW5/' BODY="crayons3.html";

PROC FREQ DATA = CRAYONS;

TABLES Issued;

RUN;

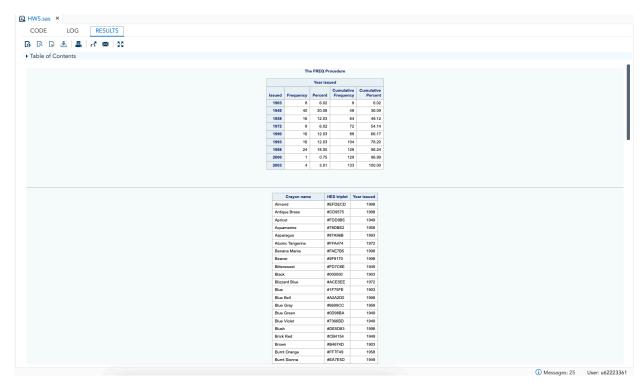
PROC REPORT DATA = CRAYONS;

COLUMN Color Hex Issued;

RUN;

ODS HTML CLOSE;

```
OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
          /* 25 C */
70
71
          ODS HTML PATH='/home/u62223361/Intro to SAS/HW5/' BODY="crayons3.html";
NOTE: Writing HTML Body file: crayons3.html
          PROC FREQ DATA = CRAYONS;
72
          TABLES Issued;
73
74
          RUN;
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE FREQ used (Total process time):
     real time
                        0.01 seconds
                       0.02 seconds
     user cpu time
     system cpu time 0.00 seconds
     memory
                       2670.75k
                       28072.00k
     OS Memory
                       03/14/2024 10:24:32 PM
     Timestamp
     Step Count
                                      186 Switch Count 2
     Page Faults
     Page Reclaims
                                      561
     Page Swaps
     Voluntary Context Switches
                                      1.0
     Involuntary Context Switches
                                      0
      Block Input Operations
     Block Output Operations
                                      344
75
          PROC REPORT DATA = CRAYONS;
          COLUMN Color Hex Issued;
76
77
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE REPORT used (Total process time):
     real time
                       0.06 seconds
                       0.07 seconds
     user cpu time
     system cpu time 0.00 seconds
     memory
                         7714.28k
     OS Memory
                         35000.00k
     Timestamp
                       03/14/2024 10:24:32 PM
     Step Count
                                      187 Switch Count 1
     Page Faults
     Page Reclaims
                                      1846
     Page Swaps
     Voluntary Context Switches
                                      34
     Involuntary Context Switches
                                      ٥
     Block Input Operations
     Block Output Operations
78
          ODS HTML CLOSE;
79
80
          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
90
```



/* 25 D */

ODS RTF PATH='/home/u62223361/Intro to SAS/HW5/' BODY="crayons3.rtf";

PROC FREQ DATA = CRAYONS;

TABLES Issued;

RUN;

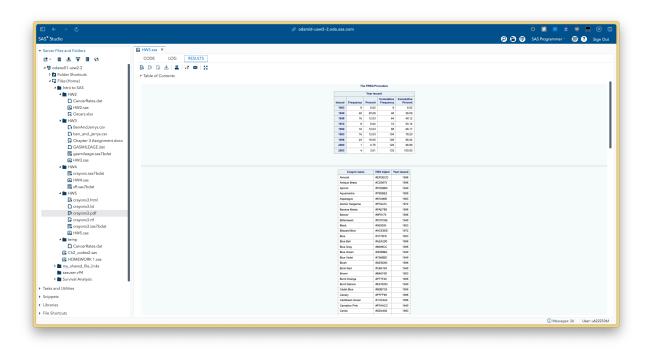
PROC REPORT DATA = CRAYONS;

COLUMN Color Hex Issued;

RUN;

ODS RTF CLOSE;

```
OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
70
          /* 25 D */
          ODS RTF PATH='/home/u62223361/Intro to SAS/HW5/' BODY="crayons3.rtf";
71
NOTE: Writing RTF Body file: crayons3.rtf
         PROC FREQ DATA = CRAYONS;
73
          TABLES Issued;
74
          RUN:
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE FREQ used (Total process time):
     real time
                        0.02 seconds
     user cpu time
                       0.02 seconds
     system cpu time 0.00 seconds
                         1909.90k
     memory
     OS Memory
                         24488.00k
     Timestamp
                        03/14/2024 10:25:16 PM
     Step Count
                                      193 Switch Count 2
     Page Faults
     Page Reclaims
                                       258
     Page Swaps
     Voluntary Context Switches
                                      10
     Involuntary Context Switches
                                      0
     Block Input Operations
                                      0
     Block Output Operations
                                     272
          PROC REPORT DATA = CRAYONS;
76
          COLUMN Color Hex Issued;
77
          RUN;
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE REPORT used (Total process time):
                     0.06 seconds
     real time
     user cpu time
                      0.06 seconds
0.00 seconds
     system cpu time
                        8277.75k
     memory
                       32440.00k
     OS Memory
                       03/14/2024 10:25:16 PM
     Timestamp
     Step Count
                                       194 Switch Count 1
     Page Faults
     Page Reclaims
                                       1986
     Page Swaps
     Voluntary Context Switches
                                      27
     Involuntary Context Switches
     Block Input Operations
                                      0
     Block Output Operations
                                     32
78
          ODS RTF CLOSE;
79
          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
80
90
```



/* 25 E */

ODS PDF FILE='/home/u62223361/Intro to SAS/HW5/crayons3.pdf';

PROC FREQ DATA = CRAYONS;

TABLES Issued;

RUN;

PROC REPORT DATA = CRAYONS;

COLUMN Color Hex Issued;

RUN;

ODS PDF CLOSE;

```
OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
69
           /* 25 E */
70
71
           ODS PDF FILE='/home/u62223361/Intro to SAS/HW5/crayons3.pdf';
NOTE: Writing ODS PDF output to DISK destination "/home/u62223361/Intro to SAS/HW5/crayons3.pdf", printer "PDF".
          PROC FREQ DATA = CRAYONS;
73
           TABLES Issued;
74
          RUN:
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE FREQ used (Total process time):
      real time
                       0.02 seconds
      user cpu time
                         0.02 seconds
                       0.00 seconds
2397.00k
     system cpu time
      memory
      OS Memory
                         27052.00k
                         03/14/2024 10:26:05 PM
     Timestamp
      Step Count
                                        207 Switch Count 2
      Page Faults
      Page Reclaims
                                        339
      Page Swaps
      Voluntary Context Switches
                                        10
     Involuntary Context Switches
Block Input Operations
                                        0
                                        0
      Block Output Operations
                                        264
          PROC REPORT DATA = CRAYONS;
          COLUMN Color Hex Issued;
76
77
           RUN;
NOTE: There were 133 observations read from the data set WORK.CRAYONS.
NOTE: PROCEDURE REPORT used (Total process time):
      real time
                       0.07 seconds
      user cpu time
                         0.07 seconds
      system cpu time
                       0.01 seconds
                         8072.00k
      memory
      OS Memory
                        34236.00k
                         03/14/2024 10:26:05 PM
      Timestamp
      Step Count
                                       208 Switch Count 1
      Page Faults
                                        0
      Page Reclaims
                                        1828
      Page Swaps
      Voluntary Context Switches
                                        26
      Involuntary Context Switches
                                        0
      Block Input Operations
                                        0
     Block Output Operations
                                        48
          ODS PDF CLOSE;
NOTE: ODS PDF printed 5 pages to /home/u62223361/Intro to SAS/HW5/crayons3.pdf.
           OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
80
9.0
```

