Program Summary - Lab0.sas

Execution Environment

Author: u63989193

File: /home/u63989193/sasuser.v94/Lab0.sas SAS Platform: Linux LIN X64 5.14.0-284.30.1.el9_2.x86_64

SAS Host: ODAWS01-USW2.ODA.SAS.COM

SAS Version: 9.04.01M7P08062020

SAS Locale: en US

Submission Time: 8/27/2024, 10:39:54 AM

Browser Host: VL1502-029168000-02.NAT.IASTATE.EDU

User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/127.0.0.0

Safari/537.36

Application Server: ODAMID00-USW2.ODA.SAS.COM

Code: Lab0.sas

```
data tomato;
    infile '/home/u63989193/my_shared_file_links/u63538023/STAT5000_Fall2024_ISU/tomato.txt';
    input group $ yield;
    run;

proc ttest;
    class group;
    var yield;
    title 'T-test of tomato yield';
    run;

proc sort;
    by group; /* sort the data by group before doing the boxplot */
    proc boxplot;
    plot yield*group;
    title 'High resolution boxplots for each group';
```

Log: Lab0.sas

```
Notes (13)
```

```
1
         OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69
          data tomato;
          infile '/home/u63989193/my_shared_file_links/u63538023/STAT5000_Fall2024_ISU/tomato.txt';
70
71
          input group $ yield;
          run;
Filename=/home/u63989193/my_shared_file_links/u63538023/STAT5000_Fall2024_ISU/tomato.txt,
     Owner Name=u63538023, Group Name=UNKNOWN,
     Access Permission=-rw-r--r--
     Last Modified=22Aug2023:14:36:27,
     File Size (bytes)=78
NOTE: 12 records were read from the infile '/home/u63989193/my shared file links/u63538023/STAT5000 Fall2024 ISU/tomato.txt'.
     The minimum record length was 0.
     The maximum record length was 6.
NOTE: SAS went to a new line when INPUT statement reached past the end of a line.
NOTE: The data set WORK.TOMATO has 11 observations and 2 variables.
NOTE: DATA statement used (Total process time):
     real time
                       0.01 seconds
     user cpu time
                       0.01 seconds
                       0.00 seconds
     system cpu time
                       755.21k
     memory
     OS Memory
                       19620.00k
```

```
Timestamp
                          08/27/2024 03:39:52 PM
      Step Count
                                        24 Switch Count 2
      Page Faults
                                        0
      Page Reclaims
                                        145
      Page Swaps
      Voluntary Context Switches
                                        24
      Involuntary Context Switches
                                        0
      Block Input Operations
                                        0
      Block Output Operations
                                        264
73
74
           proc ttest;
75
           class group;
76
           var yield;
77
           title 'T-test of tomato yield';
78
           run:
NOTE: PROCEDURE TTEST used (Total process time):
      real time
                         2.58 seconds
      user cpu time
                         0.15 seconds
                         0.05 seconds
      system cpu time
                         17879.84k
      memory
      OS Memory
                         37072.00k
      Timestamp
                         08/27/2024 03:39:54 PM
      Step Count
                                        25 Switch Count 45
      Page Faults
                                        0
      Page Reclaims
                                        28807
      Page Swaps
      Voluntary Context Switches
                                        1160
      Involuntary Context Switches
                                        5
      Block Input Operations
                                        0
     Block Output Operations
                                        1088
79
80
           proc sort;
           by group; /* sort the data by group before doing the boxplot */
81
82
NOTE: There were 11 observations read from the data set WORK.TOMATO.
NOTE: The data set WORK.TOMATO has 11 observations and 2 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time
                         0.00 seconds
                         0.00 seconds
      user cpu time
      system cpu time
                         0.01 seconds
                          946.03k
      memory
     OS Memory
                         31664.00k
     Timestamp
                         08/27/2024 03:39:54 PM
      Step Count
                                        26 Switch Count 2
      Page Faults
                                        0
      Page Reclaims
                                        123
      Page Swaps
      Voluntary Context Switches
                                        18
      Involuntary Context Switches
                                        0
      Block Input Operations
                                        0
     Block Output Operations
                                        264
82
         ! proc boxplot;
83
           plot yield*group;
84
           title 'High resolution boxplots for each group';
85
           run;
NOTE: Since an input data set was not specified, data set TOMATO is assumed as a DATA= data set.
NOTE: Processing beginning for PLOT statement number 1.
NOTE: There were 11 observations read from the data set WORK.TOMATO.
NOTE: PROCEDURE BOXPLOT used (Total process time):
      real time
                         0.16 seconds
                         0.06 seconds
      user cpu time
      system cpu time
                         0.01 seconds
      memory
                          9550.56k
      OS Memory
                          37656.00k
      Timestamp
                          08/27/2024 03:39:54 PM
      Step Count
                                        27 Switch Count 1
      Page Faults
```

Page Reclaims	1880
Page Swaps	0
Voluntary Context Switches	341
Involuntary Context Switches	3
Block Input Operations	0
Block Output Operations	352

86 87 97

OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;

Results: Lab0.sas

'T-test of tomato yield'

The TTEST Procedure

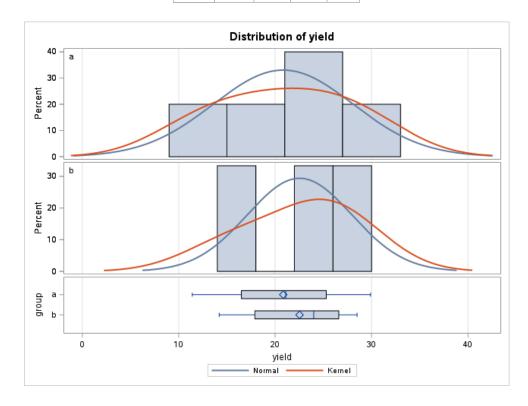
Variable: yield

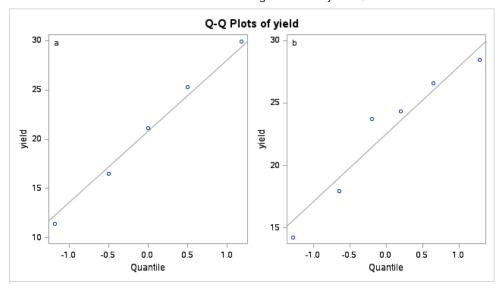
group	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
а		5	20.8400	7.2456	3.2403	11.4000	29.9000
b		6	22.5333	5.4320	2.2176	14.2000	28.5000
Diff (1-2)	Pooled		-1.6933	6.3028	3.8165		
Diff (1-2)	Satterthwaite		-1.6933		3.9265		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
а		20.8400	11.8435	29.8365	7.2456	4.3410	20.8205
b		22.5333	16.8328	28.2339	5.4320	3.3907	13.3226
Diff (1-2)	Pooled	-1.6933	-10.3269	6.9402	6.3028	4.3353	11.5064
Diff (1-2)	Satterthwaite	-1.6933	-10.8923	7.5056			

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	9	-0.44	0.6677
Satterthwaite	Unequal	7.3369	-0.43	0.6787

Equality of Variances						
Method	Num DF	Den DF	F Value	Pr > F		
Folded F	4	5	1.78	0.5400		





'High resolution boxplots for each group'

