

STAT 8510
Homework #1
Due Aug. 26, 2021

1. Use the following data on 5 different fever blister treatments and the number of days from blister eruption to healing. There are 6 individuals in each treatment group for a total of 30 observations. You can create a separate file or have two data steps with different dataset names within the same SAS program. Do the following:
 - a. Create a data step in SAS using list input with one line per observation.
 - b. Create a data set in SAS using list input with the @@ allowing multiple observations to be entered on each line.
 - c. Use PROC PRINT to print each data set and verify that the data are entered correctly.

Trt	Days	Trt	Days	Trt	Days	Trt	Days	Trt	Days
Placebo	5	Trt1	4	Trt2	6	Trt3	7	Trt4	9
Placebo	8	Trt1	6	Trt2	4	Trt3	4	Trt4	3
Placebo	7	Trt1	6	Trt2	4	Trt3	6	Trt4	5
Placebo	7	Trt1	3	Trt2	5	Trt3	6	Trt4	7
Placebo	10	Trt1	5	Trt2	4	Trt3	3	Trt4	7
Placebo	8	Trt1	6	Trt2	3	Trt3	5	Trt4	6

2. Use the following data regarding recumbent and standing systolic and diastolic blood pressure for 32 individuals. The data set, bp.txt, can be found on the in the D2L folder homeworks/HW1/. Download the data and Do the following:
 - a. Create a SAS data step using column input. The variables, column location and type are listed below.
 - b. Use PROC PRINT to print the data set and verify that the data are entered correctly.

<u>Variable</u>	<u>Column</u>	<u>Variable Type</u>
Id	1-2	Numeric
Recumbent SBP	9-11	Numeric
Recumbent DBP	17-18	Numeric
Standing SBP	25-27	Numeric
Standing DBP	33-34	Numeric

3. Using the following data on 200 babies. The data set, babies.txt, can be found in the D2L folder homeworks/HW1/. Download the data and do the following:
 - a. Create a SAS data step using an INFILE statement, column input and column pointers (when inputting the date). The variables, column location and type are listed below.
 - b. Use PROC PRINT to print the data set and verify that the data are entered correctly.

<u>Variable</u>	<u>Column</u>	<u>Variable Type</u>
Sex	1-6	Character
Prenatal care	9-12	Character
Smoking status	17-19	Character
Weeks gestation	25-26	Numeric
Birth weight in grams	33-36	Numeric
Length in inches	41-44	Numeric
Date of birth	49-58	Date in MMDDYY format

4. TXT File “Person.TXT” is part of census data set and is located in the D2L folder homeworks/HW1//. We would like to get following variables to create a permanent SAS data named “Personal” only if “ASTATFLG” is not missing.

Variables and locations:

<u>Variable</u>	<u>Column</u>	<u>Variable Type</u>
RECTYPE	1- 2	Character
HHX	7-12	Character
FMX	13-14	Character
PX	15-16	Character
SEX	18	Character
AGE_P	19-20	Numeric
R_AGE1	21	Character
R_AGE2	22	Character
DOB_M	23-24	Character
DOB_Y_P	25-28	Character
ORIGIN_I	29	Numeric
ORIGIMPT	30	Numeric
HISPAN_I	31-32	Numeric
HISPIMPT	33	Numeric
RACERPI2	34-35	Numeric
RACEIMP2	36	Numeric
MRACRPI2	37-38	Numeric
MRACBPI2	39-40	Character
RACRECI2	41	Character
FMRPFLG	61	Character
ASTATFLG	84	Character
REGION	87	Character
WTIA	89-93	Numeric with one decimal
WTFA	96-99	Numeric
STRATUM	100-102	Character
PSU	103	Character