

```

1  /*LIBNAME FOR OUTPUT and INPUT FOLDERS*/
2  LIBNAME Parks '/home/u59841240/Capstone/input';
3  LIBNAME Results '/home/u59841240/Capstone/output';
4  /*IMPORT THE EXCEL DATA FILE INTO SAS*/
5  Options VALIDVARNAME=ANY;
6  PROC IMPORT datafile='/home/u59841240/Capstone/Data File/Monthly Data 2017_2021.xlsx' dbms=XLZX out=Parks.monthlyData;
7  RUN;
8  /*CHECKING THE DATASET WAS IMPORTED*/
9  PROC PRINT data=parks.monthlydata (obs=1000);
10 RUN;
11 /*CHECKING THE VARIABLES*/
12 PROC contents data=parks.monthlydata;
13 RUN;
14 /*CLEANING THE DATA SET*/
15 data Parks.MonthlySummaryData;
16 set Parks.monthlydata;
17 rename RecreationVisits = Recreation;
18 drop ParkType NonRecreationHours Region State UnitCode RecreationHours;
19 format RecreationVisits comma15.2 NonRecreationVisits comma15.2 RVCampers comma15.2 TentCampers comma15.2 BackcountryCamp
20 totalvisits = SUM(of RecreationVisits NonRecreationVisits RVCampers TentCampers BackcountryCampers ConcessionerCamping Co
21 if missing(RecreationVisits) then PUT "Recreation Visits is missing from the data set";
22 if missing(NonRecreationVisits) then PUT "Non Recreation Visits is missing from the data set";
23 if missing(RVCampers) then PUT "RV Campers is missing from the data set";
24 if missing(TentCampers) then PUT "Tent Campers is missing from the data set";
25 if missing(BackcountryCampers) then PUT "Backcountry Campers is missing from the data set";
26 if missing(ConcessionerLodging) then PUT "Concessioner Lodging is missing from the data set";
27 if missing(MiscOvernightStays) then PUT "Misc. Overnight Stays is missing from the data set";
28 if missing(NonRecreationOvernightStays) then PUT "Non Recreation Overnight Stays is missing from the data set";
29 if missing(ConcessionerCamping) then PUT "Concessioner Camping is missing from the data set";
30 RUN;
31
32 proc sort data = parks.MonthlySummaryData out=Parks.MonthlySorted nodup;
33 by Park year Month;
34 run;
35
36 data Parks.MonthlyClean;
37 set Parks.MonthlySorted;
38 drop NonRecreationVisits RVCampers TentCampers BackcountryCampers ConcessionerCamping ConcessionerLodging MiscOvern:
39 RUN;
40
41 data Results.MonthlyCleanData;
42 set Parks.MonthlyClean;
43 RUN;
44
45 PROC print data=Results.MonthlyCleanData;
46 RUN;
47
48 DATA Parks.filteredMonthlyData;
49 set Parks.monthlyClean;
50 where park IN ('Great Smoky Mountains NP','Yellowstone NP');
51 run;
52
53 PROC PRINT DATA=parks.filteredMonthlyData;
54 RUN;
55
56 data Results.filteredMonthlyData;
57 set parks.filteredmonthlydata;
58 Run;
59
60 PROC PRINT DATA=Results.filteredMonthlyData;
61 RUN;
62
63 PROC univariate data= parks.filteredmonthlydata;
64 RUN;
65
66 ods graphics on;
67 title 'Bivariate Data';
68 proc corr data=Parks.filteredMonthlyData polychoric nomiss plots=matrix(histogram);
69 var year recreation totalvisits month;
70 by park;
71 run;

```