

```

1928 *STEP 1 ;
1929 /*****
1929! *****/
1930 /*1. Program Name:Vivek235_HW05_Program.sas
1930! */
1931 /* Program Location: C:\Users\vigupta\OneDrive\Learning\DataScience\Statistics Texas A&M
1931! University\657\Homework\Assignment05\Assignment\Vivek235_HW05_Program.sas */
1932 /* Date Created: 2/8/17
1932! */
1933 /* Author: Vivek Kumar Gupta
1933! */
1934 /* Purpose: This assignment will primarily utilize, but is not limited to, techniques
1934! covered in the lectures 5 to 7. */
1935 /*****
1935! *****/
1936
1937 *STEP 1 ;
1938 *1.Create the necessary library references for data sources and destination and file
1938! references for output. Turn off page numbering ;
1939 libname ncaa 'C:\Users\vigupta\OneDrive\Learning\DataScience\Statistics Texas A&M
1939! University\657\Homework\Assignment05\SourceData' access=readonly;
NOTE: Libref NCAA was successfully assigned as follows:
      Engine:          V9
      Physical Name: C:\Users\vigupta\OneDrive\Learning\DataScience\Statistics Texas A&M
      University\657\Homework\Assignment05\SourceData
1940 filename pdfdev 'C:\Users\vigupta\OneDrive\Learning\DataScience\Statistics Texas A&M
1940! University\657\Homework\Assignment05\Vivek235_HW05_Output.pdf';
1941
1942 /*Add neccessary ODS statements and change options as needed by the program*/
1943 option nonumber;
1944 ods pdf file= pdfdev startpage=no style =minimal;
NOTE: Writing ODS PDF output to DISK destination "PDFDEV", printer "PDF".
1945 ods escapechar= '^';
1946
1947 /* STEP 2. Write a complete PROC SQL step that will create a table, scoring04 as directed in
1947! substeps a,b,c */
1948
1949 proc sql ;
1950     create table work.scoring03 as
1951     select  player,team,region,ppg,avg(ppg) as avg_PPG_all label "Overall Average PPG"
1952     from ncaa.scholarship03

```

1953        where Seed\_ not in (15, 16);

NOTE: The query requires remerging summary statistics back with the original data.

NOTE: Table WORK.SCORING03 created, with 248 rows and 5 columns.

1954

1955 quit;

NOTE: PROCEDURE SQL used (Total process time):

real time            0.03 seconds

cpu time            0.01 seconds

1956

1957 /\*STEP 3.Use a SINGLE proc sql step to create the two reports shown in the output PDF posted

1957! on

1958 eCampus. Please note ODS statements are declared at the beginning of the program\*/

1959

1960 /\* STEP 3a,b,c,d :First part of the report\*/

1961 proc sql ;

1962

1963 title"Average Scholarships for State Schools";

1964 select player, team

1965            ,sum(amt1,amt2,amt3,amt4,amt5,amt6,amt7,amt8,amt9,amt10) as Total\_Scholarship label

1965! 'Total Scholarship' format dollar10.

1966            ,max(amt1,amt2,amt3,amt4,amt5,amt6,amt7,amt8,amt9,amt10)as Max\_Scholarship label

1966! 'Maximum Scholarship' format dollar10.

1967            ,N(amt1,amt2,amt3,amt4,amt5,amt6,amt7,amt8,amt9,amt10)as Freq\_Scholarship label

1967! 'Scholarships'

1968 from ncaa.scholarship03

1969 where find(team,'St',2)>0

1970 group by player, team

1971 having Freq\_Scholarship>1

1972 order by team>Total\_Scholarship desc ;

NOTE: A GROUP BY clause has been discarded because neither the SELECT clause nor the optional HAVING clause of the associated table-expression referenced a summary function.

1973

1974 /\*Use the appropriate styles to align the text center to the report and rest the title for

1974! the second report\*/

1975 ods pdf text="^{style [textalign=c]}^{newline 2}2003 NCAA Team Scoring Analysis" ;

1976 title"2003 NCAA Team Scoring Analysis";

1977

1978 /\* STEP 4a,b,c,d,e :Second part of the report based on scoring03 dataset\*/

```

1979 select team
1980         , count(*) as Players
1981         , avg(ppg) as avg_ppg label 'Average PPG' format 5.1
1982         , avg(ppg)/avg_PPG_all as overall_avg label 'Team vs. Overall' format percent8.1
1983         , case
1984             when avg(ppg) > avg_PPG_all then 'Above Avg.'
1985             else 'Avg. or Below'
1986         end as ppg_level label 'PPG Level'
1987 from work.scoring03
1988 group by team,avg_PPG_all
1989 having players >= 5
1990 order by avg_ppg desc;
1991 quit;

```

```

NOTE: PROCEDURE SQL used (Total process time):
      real time           0.14 seconds
      cpu time            0.14 seconds

```

```

1992
1993 /*House keeping*/
1994 title;
1995 option number;
1996
1997 /*Close the ODS destination*/
1998 ods pdf close;

```

```

NOTE: ODS PDF printed 2 pages to C:\Users\vigupta\OneDrive\Learning\DataScience\Statistics Texas
      A&M University\657\Homework\Assignment05\Vivek235_HW05_Output.pdf.

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