

## Program Summary - GroupAssignment2.sas

### Execution Environment

Author: u63417893  
 File: /home/u63417893/BANZBB130/GroupAssignment2.sas  
 SAS Platform: Linux LIN X64 3.10.0-1062.12.1.el7.x86\_64  
 SAS Host: ODAWS01-USW2-2.ODA.SAS.COM  
 SAS Version: 9.04.01M7P08062020  
 SAS Locale: en\_US  
 Submission Time: 7/7/2023, 4:52:01 PM  
 Browser Host: BRAS-BASE-TOROON2176W-GRC-15-142-115-70-173.DSL.BELL.CA  
 User Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/114.0.0.0 Safari/537.36  
 Application Server: ODAMID00-USW2-2.ODA.SAS.COM

### Code: GroupAssignment2.sas

```
* GROUP 2- ASSIGNMENT 2
```

```
Members:
```

```
John James
Chinonso Henry Ezeudogu
Kaveen Dias
Pubudu Dias
Temitope Saubana
Ugonna Okengwu
```

```
*****
;
```

```
****PART 1****;
```

```
libname Grp2"/home/u63417893/BANZBB130";
run;
```

```
Data EU_OCC2016;
Set grp2.eu_occ;
Where substr(YearMon,1,4)="2016";* finding stays reported in 2016;
Format hotel Comma17.;*formatting;
Drop geo;* dropping geo from the table;
run;
```

```
****PART 2****;
```

```
Data np_summary_update;
Set grp2.np_summary;
SqMiles=Acres*0.0015625; *computing Acres;
Camping=Sum(OtherCamping, TentCampers, RvCampers, BackcountryCampers); *Summation;
Format SqMiles Camping comma10.;*formatting;
Keep Reg ParkName DayVisits OtherLodging Acres SqMiles Camping;
run;
```

```
Proc Print Data=np_summary_update;
run;
```

```
****PART 3****;
```

```
Data park_type;
Set grp2.np_summary;

*Assigning condition statements;
```

```

If Type="NM"
Then ParkType="Monument";
Else If Type="NP"
Then ParkType="Park";
Else If Type="NPRE" or Type= "PRE" or Type= "PRESERVE"
Then ParkType="Preserve";
Else If Type="NS"
Then ParkType="Seashore";
Else If Type= "RVR" or Type= "RIVERWAYS"
Then Parktype="River";
run;

```

---

```
Proc Freq Data=park_type; *frequency by parktype;
```

---

## Log: GroupAssignment2.sas

Notes (14)

```

1      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69      * GROUP 2- ASSIGNMENT 2
70      -----
71
72      Members:
73      John James
74      Chinonso Henry Ezeudogu
75      Kaveen Dias
76      Pubudu Dias
77      Temitope Saubana
78      Ugonna Okengwu
79
80      *****
81      ;
82
83      ****PART 1****;
84
85      libname Grp2"/home/u63417893/BANZBB130";
NOTE: Libref GRP2 was successfully assigned as follows:
      Engine:          V9
      Physical Name: /home/u63417893/BANZBB130
86      run;
87
88      Data EU_OCC2016;
89      Set grp2.eu_occ;
90      Where substr(YearMon,1,4)="2016";* finding stays reported in 2016;
91      Format hotel Comma17.;*formatting;
92      Drop geo;* dropping geo from the table;
93      run;

NOTE: There were 348 observations read from the data set GRP2.EU_OCC.
      WHERE SUBSTR(YearMon, 1, 4)='2016';
NOTE: The data set WORK.EU_OCC2016 has 348 observations and 5 variables.
NOTE: DATA statement used (Total process time):
      real time          0.00 seconds
      user cpu time      0.01 seconds
      system cpu time    0.00 seconds
      memory             1240.15k
      OS Memory          20264.00k
      Timestamp          07/07/2023 08:52:00 PM
      Step Count          24      Switch Count  5
      Page Faults         0
      Page Reclaims       394
      Page Swaps          0
      Voluntary Context Switches  24
      Involuntary Context Switches 0
      Block Input Operations 0
      Block Output Operations 264

94
95      ****PART 2****;
96
97      Data np_summary_update;

```

```

98      Set grp2.np_summary;
99      SqMiles=Acres*0.0015625; *computing Acres;
100     Camping=Sum(OtherCamping, TentCampers, RvCampers, BackcountryCampers); *Summation;
101     Format SqMiles Camping comma10.;*formatting;
102     Keep Reg ParkName DayVisits OtherLodging Acres SqMiles Camping;
103     run;

```

NOTE: There were 135 observations read from the data set GRP2.NP\_SUMMARY.

NOTE: The data set WORK.NP\_SUMMARY\_UPDATE has 135 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
memory	963.12k
OS Memory	20136.00k
Timestamp	07/07/2023 08:52:00 PM
Step Count	25
Page Faults	0
Page Reclaims	149
Page Swaps	0
Voluntary Context Switches	18
Involuntary Context Switches	0
Block Input Operations	0
Block Output Operations	272

```

104
105     Proc Print Data=np_summary_update;
106     run;

```

NOTE: There were 135 observations read from the data set WORK.NP\_SUMMARY\_UPDATE.

NOTE: PROCEDURE PRINT used (Total process time):

real time	0.16 seconds
user cpu time	0.16 seconds
system cpu time	0.00 seconds
memory	1281.12k
OS Memory	20644.00k
Timestamp	07/07/2023 08:52:00 PM
Step Count	26
Page Faults	0
Page Reclaims	442
Page Swaps	0
Voluntary Context Switches	0
Involuntary Context Switches	0
Block Input Operations	0
Block Output Operations	72

```

107
108     ****PART 3****;
109
110     Data park_type;
111     Set grp2.np_summary;
112
113     *Assigning condition statements;
114
115     If Type="NM"
116     Then ParkType="Monument";
117     Else If Type="NP"
118     Then ParkType="Park";
119     Else If Type="NPRE" or Type= "PRE" or Type= "PRESERVE"
120     Then ParkType="Preserve";
121     Else If Type="NS"
122     Then ParkType="Seashore";
123     Else If Type= "RVR" or Type= "RIVERWAYS"
124     Then Parktype="River";
125     run;

```

NOTE: There were 135 observations read from the data set GRP2.NP\_SUMMARY.

NOTE: The data set WORK.PARK\_TYPE has 135 observations and 11 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
memory	965.46k
OS Memory	21160.00k

```
Timestamp          07/07/2023 08:52:00 PM
Step Count          27  Switch Count  2
Page Faults         0
Page Reclaims       127
Page Swaps          0
Voluntary Context Switches  13
Involuntary Context Switches 0
Block Input Operations  0
Block Output Operations 264
```

```
126
127 Proc Freq Data=park_type; *frequency by parktype;
128 Tables ParkType;
129 run;
```

NOTE: There were 135 observations read from the data set WORK.PARK\_TYPE.  
NOTE: PROCEDURE FREQ used (Total process time):

```
real time          0.01 seconds
user cpu time       0.02 seconds
system cpu time     0.00 seconds
memory             1025.00k
OS Memory           21416.00k
Timestamp           07/07/2023 08:52:00 PM
Step Count          28  Switch Count  2
Page Faults         0
Page Reclaims       348
Page Swaps          0
Voluntary Context Switches  9
Involuntary Context Switches 0
Block Input Operations  0
Block Output Operations 264
```

```
130
131 OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
141
```

Results: GroupAssignment2.sas

Obs	Reg	ParkName	DayVisits	OtherLodging	Acres	SqMiles	Camping
1	A	Cape Krusenstern National Monument	15,000	0	649,096.15	1,014	6,375
2	A	Kenai Fjords National Park	346,534	0	669,650.05	1,046	2,162
3	A	Kobuk Valley National Park	15,500	0	1,750,716.16	2,735	7,050
4	A	Yukon-Charley Rivers National Preserve	1,146	0	2,523,512.44	3,943	3,063
5	A	Bering Land Bridge National Preserve	2,642	0	2,697,391.01	4,215	1,123
6	A	Noatak National Preserve	17,000	0	6,587,071.39	10,292	5,500
7	IM	Alibates Flint Quarries National Monument	8,153	0	1,370.97	2	0
8	IM	Aztec Ruins National Monument	57,692	0	318.40	0	0
9	IM	Bandelier National Monument	198,478	0	33,676.67	53	10,533
10	IM	Canyon De Chelly National Monument	821,406	23,259	83,840.00	131	11,918
11	IM	Capulin Volcano National Monument	60,132	0	792.84	1	0
12	IM	Casa Grande Ruins National Monument	75,752	0	472.50	1	0
13	IM	Cedar Breaks National Monument	899,676	0	6,154.60	10	4,277
14	IM	Chiricahua National Monument	51,277	0	12,024.73	19	11,674
15	IM	Colorado National Monument	391,075	0	20,536.39	32	31,161
16	IM	Devils Tower National Monument	496,210	0	1,347.21	2	17,383
17	IM	Dinosaur National Monument	304,312	0	210,281.92	329	65,402
18	IM	El Malpais National Monument	157,440	0	114,347.11	179	0
19	IM	El Morro National Monument	59,422	0	1,278.72	2	2,995
20	IM	Florissant Fossil Beds National Monument	73,564	0	5,998.09	9	0
21	IM	Fort Union National Monument	11,953	0	720.60	1	0
22	IM	Fossil Butte National Monument	20,737	0	8,198.00	13	0
23	IM	Gila Cliff Dwellings National Monument	41,519	0	533.13	1	0
24	IM	Hovenweep National Monument	42,862	0	784.93	1	2,395
25	IM	Little Bighorn Battlefield National Monument	332,328	0	765.34	1	0
26	IM	Montezuma Castle National Monument	392,168	0	1,015.52	2	0
27	IM	Natural Bridges National Monument	101,843	0	7,636.49	12	7,015
28	IM	Navajo National Monument	65,705	0	360.00	1	3,377
29	IM	Organ Pipe Cactus National Monument	234,186	0	330,688.86	517	27,178
30	IM	Rainbow Bridge National Monument	86,369	0	160.00	0	0
31	IM	Salinas Pueblo Missions National Monument	32,414	0	1,071.42	2	0
32	IM	Sunset Crater Volcano National Monument	60,233	0	3,040.00	5	0

Obs	Reg	ParkName	DayVisits	OtherLodging	Acres	SqMiles	Camping
33	IM	Timpanogos Cave National Monument	91,261	0	250.00	0	0
34	IM	Tonto National Monument	38,048	0	1,120.00	2	0
35	IM	Tuzigoot National Monument	104,604	0	811.89	1	0
36	IM	Walnut Canyon National Monument	152,444	0	3,529.26	6	0
37	IM	White Sands National Monument	555,793	0	143,733.25	225	4,331
38	IM	Wupatki National Monument	223,172	0	35,422.13	55	8
39	IM	Arches National Park	1,585,718	0	76,678.98	120	47,878
40	IM	Big Bend National Park	388,290	48,280	801,163.21	1,252	145,425
41	IM	Black Canyon of the Gunnison National Park	238,018	0	30,749.75	48	32,884
42	IM	Bryce Canyon National Park	2,365,110	56,844	35,835.08	56	103,644
43	IM	Canyonlands National Park	776,218	0	337,597.83	527	108,028
44	IM	Capitol Reef National Park	1,064,904	0	241,904.26	378	43,420
45	IM	Carlsbad Caverns National Park	466,773	0	46,766.45	73	251
46	IM	Glacier National Park	2,946,681	99,550	1,013,128.94	1,583	301,953
47	IM	Grand Canyon National Park	5,969,811	600,307	1,201,647.03	1,878	650,186
48	IM	Grand Teton National Park	3,270,076	196,577	310,043.96	484	333,290
49	IM	Guadalupe Mountains National Park	181,839	0	86,367.10	135	19,862
50	IM	Mesa Verde National Park	583,527	26,800	52,485.17	82	56,998
51	IM	Petrified Forest National Park	643,274	0	221,415.77	346	486
52	IM	Pinnacles National Park	215,555	0	26,685.73	42	0
53	IM	Rocky Mountain National Park	4,517,585	0	265,795.20	415	223,525
54	IM	Saguaro National Park	820,426	0	91,715.72	143	1,868
55	IM	Yellowstone National Park	4,257,177	579,227	2,219,790.71	3,468	798,361
56	IM	Zion National Park	4,295,127	86,456	147,237.02	230	236,418
57	IM	Padre Island National Seashore	634,012	0	130,434.27	204	66,812
58	IM	Big Thicket National Preserve	192,809	0	112,500.81	176	3,339
59	MW	Agate Fossil Beds National Monument	15,555	0	3,057.87	5	0
60	MW	Effigy Mounds National Monument	77,195	0	2,526.39	4	0
61	MW	George Washington Carver National Monument	46,397	0	210.00	0	0
62	MW	Grand Portage National Monument	95,862	0	709.97	1	36
63	MW	Jewel Cave National Monument	137,275	0	1,273.51	2	0
64	MW	Petroglyph National Monument	124,177	0	7,209.30	11	0
65	MW	Pipe Spring National Monument	46,710	0	40.00	0	0
66	MW	Scotts Bluff National Monument	130,085	0	3,004.73	5	0
67	MW	Badlands National Park	996,263	9,875	242,755.94	379	57,975
68	MW	Cuyahoga Valley National Park	2,423,390	7,797	32,572.35	51	0
69	MW	Hot Springs National Park	1,544,300	0	5,549.10	9	24,021
70	MW	Isle Royale National Park	24,966	10,128	571,790.11	893	25,935
71	MW	Theodore Roosevelt National Park	753,880	0	70,446.89	110	32,797
72	MW	Voyageurs National Park	241,912	3,983	218,200.15	341	46,451
73	MW	Wind Cave National Park	617,377	0	33,970.84	53	8,987
74	MW	Tallgrass Prairie National Preserve	29,378	0	10,882.67	17	0
75	MW	Ozark National Scenic Riverways	1,241,480	0	80,785.04	126	87,152
76	MW	Buffalo National River	1,785,359	3,150	94,293.31	147	85,131
77	NC	Pipestone National Monument	67,489	0	281.78	0	0
78	NE	African Burial Ground National Monument	46,526	0	0.35	0	0
79	NE	Booker T. Washington National Monument	23,440	0	239.01	0	0
80	NE	Castle Clinton National Monument	4,812,930	0	1.00	0	0
81	NE	Fort Stanwix National Monument	94,006	0	15.52	0	0
82	NE	George Washington Birthplace National Monument	129,750	0	653.18	1	0
83	NE	Governors Island National Monument	522,859	0	22.91	0	0
84	NE	Statue of Liberty National Monument	4,501,547	0	58.38	0	0
85	NE	Acadia National Park	3,303,393	0	49,057.36	77	201,741
86	NE	Shenandoah National Park	1,437,341	101,538	199,195.27	311	229,674
87	NE	Assateague Island National Seashore	2,267,821	0	41,346.50	65	62,534
88	NE	Cape Cod National Seashore	4,692,796	3,365	43,608.43	68	0
89	NE	Fire Island National Seashore	431,303	0	19,580.42	31	4,056
90	NE	New River Gorge National River	1,197,931	0	72,185.76	113	5,491
91	PW	Cabrillo National Monument	959,145	0	159.94	0	0
92	PW	Devils Postpile National Monument	135,404	0	800.19	1	0
93	PW	Hagerman Fossil Beds National Monument	25,982	0	4,351.15	7	0
94	PW	John Day Fossil Beds National Monument	210,110	0	14,062.02	22	0
95	PW	Lava Beds National Monument	127,699	0	46,692.42	73	10,406
96	PW	Muir Woods National Monument	1,123,121	0	553.55	1	0
97	PW	Channel Islands National Park	364,807	0	249,561.00	390	22,885
98	PW	Crater Lake National Park	756,344	35,871	183,224.05	286	61,747
99	PW	Death Valley National Park	1,296,283	24,668	3,373,063.14	5,270	217,495
100	PW	Great Basin National Park	144,846	0	77,180.00	121	42,558
101	PW	Haleakala National Park	1,263,558	0	33,264.62	52	10,724
102	PW	Hawaii Volcanoes National Park	1,887,580	30,606	323,431.38	505	11,302
103	PW	Joshua Tree National Park	2,505,286	0	790,635.74	1,235	319,568

Obs	Reg	ParkName	DayVisits	OtherLodging	Acres	SqMiles	Camping
104	PW	Kings Canyon National Park	607,479	50,079	461,901.20	722	155,222
105	PW	Lassen Volcanic National Park	536,068	6,182	106,589.02	167	96,432
106	PW	Mount Rainier National Park	1,356,913	42,223	236,381.64	369	150,882
107	PW	North Cascades National Park	28,646	0	504,780.94	789	25,516
108	PW	Olympic National Park	3,390,221	85,450	922,650.10	1,442	310,980
109	PW	Redwood National Park	536,297	0	138,999.97	217	9,660
110	PW	Sequoia National Park	1,254,688	63,940	404,062.63	631	255,693
111	PW	Yosemite National Park	5,028,868	743,546	761,747.50	1,190	1,084,164
112	PW	Point Reyes National Seashore	2,438,442	10,347	71,055.41	111	43,412
113	PW	Mojave National Preserve	585,635	0	1,542,775.80	2,411	2,962
114	SE	Buck Island Reef National Monument	38,929	0	19,015.47	30	0
115	SE	Castillo De San Marcos National Monument	854,664	0	19.38	0	0
116	SE	Fort Frederica National Monument	192,906	0	284.49	0	0
117	SE	Fort Matanzas National Monument	557,810	0	300.11	0	0
118	SE	Fort Pulaski National Monument	344,921	0	5,623.10	9	0
119	SE	Fort Sumter National Monument	888,330	0	234.74	0	0
120	SE	Ocmulgee National Monument	162,260	0	703.70	1	0
121	SE	Russell Cave National Monument	24,649	0	310.45	0	0
122	SE	Biscayne National Park	514,709	0	172,971.11	270	2,522
123	SE	Congaree National Park	143,843	0	26,275.82	41	286
124	SE	Dry Tortugas National Park	73,661	0	64,701.22	101	5,934
125	SE	Everglades National Park	930,907	0	1,400,539.30	2,188	31,935
126	SE	Great Smoky Mountains National Park	11,312,786	11,493	522,426.88	816	411,603
127	SE	Little River Canyon National Preserve	462,700	0	15,288.53	24	0
128	SE	Mammoth Cave National Park	586,514	16,365	52,830.19	83	60,972
129	SE	Virgin Islands National Park	411,343	14,214	14,948.46	23	15,842
130	SE	Canaveral National Seashore	1,629,944	0	57,661.69	90	2,636
131	SE	Cape Hatteras National Seashore	2,411,711	0	30,350.65	47	66,062
132	SE	Cape Lookout National Seashore	458,000	10,118	28,243.36	44	37,197
133	SE	Cumberland Island National Seashore	61,896	0	36,346.83	57	19,163
134	SE	Gulf Islands National Seashore	4,771,309	0	138,305.52	216	178,701
135	SE	Big Cypress National Preserve	1,102,148	0	574,453.32	898	17,714

The FREQ Procedure

ParkType	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Monument	63	46.67	63	46.67
Park	51	37.78	114	84.44
Preserve	8	5.93	122	90.37
River	3	2.22	125	92.59
Seashore	10	7.41	135	100.00