

Task 1

```
===== RESTART: D:/python/springs/ta
rank discipline phd service sex salary
0 Prof B 56 49 Male 186960
1 Prof A 12 6 Male 93000
2 Prof A 23 20 Male 110515
3 Prof A 40 31 Male 131205
4 Prof B 20 18 Male 104800
|
```

Program 2

```
===== RESTART: D:/python/springs/ta
HP MPG VOL SP WT
0 49 53.700681 89 104.185353 28.762059
1 55 50.013401 92 105.461264 30.466833
2 55 50.013401 92 105.461264 30.193597
3 70 45.696322 92 113.461264 30.632114
4 53 50.504232 92 104.461264 29.889149
|
```

Head

```
===== RESTART: D:/python/springs/ta
HP MPG VOL SP WT
0 49 53.700681 89 104.185353 28.762059
1 55 50.013401 92 105.461264 30.466833
2 55 50.013401 92 105.461264 30.193597
3 70 45.696322 92 113.461264 30.632114
4 53 50.504232 92 104.461264 29.889149
|
```

Tail

```
===== RESTART: D:/python/springs/ta
HP MPG VOL SP WT
76 322 36.900000 50 169.598513 16.132947
77 238 19.197888 115 150.576579 37.923113
78 263 34.000000 50 151.598513 15.769625
79 295 19.833733 119 167.944460 39.423099
80 236 12.101263 107 139.840817 34.948615
|
```

Shape

```
=====
(81, 5)
|
```

Describe

```
===== RESTART: D:/python/sprint3/task2.py =====
      HP      MPG      VOL      SP      WT
count  81.000000  81.000000  81.000000  81.000000  81.000000
mean   117.469136  34.422076  98.765432  121.540272  32.412577
std     57.113502   9.131445  22.301497  14.181432   7.492813
min     49.000000  12.101263  50.000000  99.564907  15.712859
25%     84.000000  27.856252  89.000000  113.829145  29.591768
50%    100.000000  35.152727 101.000000  118.208698  32.734518
75%    140.000000  39.531633 113.000000  126.404312  37.392524
max    322.000000  53.700681 160.000000  169.598513  52.997752
```

Task 2

```
===== RESTART: D:/python/sprint3/task2.py =====
DataFrame Creation:
   Name  Age  city
0  John  25  New York
1  Jane  30  London
2  Babu  35  Paris
3  Peter 40   UK
4  Leju  55  Germany

To retrieve the first five rows
   Name  Age  city
0  John  25  New York
1  Jane  30  London
2  Babu  35  Paris
3  Peter 40   UK
4  Leju  55  Germany

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 5 entries, 0 to 4
Data columns (total 3 columns):
#   Column  Non-Null Count  Dtype
---  ---
0   Name    5 non-null      object
1   Age     5 non-null      int64
2   city    5 non-null      object
dtypes: int64(1), object(2)
memory usage: 248.0+ bytes
None
```

Task 3

===== RESTART: D:\python\sprint3\task2.py =====

Department

Finance 62500.0

HR 51000.0

IT 71000.0

Name: Salary, dtype: float64

Multiple columns

	Salary			YearsOfExperience		Age
	mean	min	max	mean	sum	mean
Department						
Finance	62500.0	60000	65000	5.5	11	35.500000
HR	51000.0	50000	52000	4.0	12	28.333333
IT	71000.0	70000	72000	7.5	15	32.500000

	Salary			YearsOfExperience		Age
	mean	min	max	mean	sum	mean
Department						
Finance	62500.0	60000	65000	5.5	11	35.5
IT	71000.0	70000	72000	7.5	15	32.5

	Age	Salary
	mean	mean
Department		
Finance	35.500000	62500.0
HR	28.333333	51000.0
IT	32.500000	71000.0

|