Assigment on Data_Science concepts
1)Quan,Qual,
2)Measure of Loacation of Data- Frequency, Relative Frequency, Cumulative Frequency, Percentile
3)Measure of central tendency - Mean, Median, Mode

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In [1]:
```
import pandas as pd
dataset=pd.read_csv('Placement.csv')
from univariant import Univariate
obj=Univariate()
Quan,Qual=obj.QuanQual(dataset)
```

```
sl_no
gender
ssc_p
ssc_b
hsc_p
hsc_b
hsc_s
degree_p
degree_t
workex
etest_p
specialisation
mba_p
status
salary
```

In [2]:
```
Quan
```

Out[2]:
```
['sl_no', 'ssc_p', 'hsc_p', 'degree_p', 'etest_p', 'mba_p', 'salary']
```

In [3]:
```
Qual
```

Out[3]:
```
['gender',
 'ssc_b',
 'hsc_b',
 'hsc_s',
 'degree_t',
 'workex',
 'specialisation',
 'status']
```

In [4]:
```
obj.FreqTable(dataset,"ssc_p")
```

Out[4]:

	unique_values	Frequency	Relative_Freq	Cum_Freq
0	48.00	1	0.970874	0.970874
1	61.08	1	0.970874	1.941748
2	55.68	1	0.970874	2.912621
3	81.70	1	0.970874	3.883495
4	51.57	1	0.970874	4.854369
...	...	...	...	...
98	73.00	9	8.737864	170.873786
99	52.00	9	8.737864	179.611650
100	67.00	9	8.737864	188.349515
101	63.00	10	9.708738	198.058252
102	62.00	11	10.679612	208.737864

103 rows × 4 columns

In [5]:
```
obj.FreqTable(dataset,"ssc_p")
```

Out[5]:

	unique_values	Frequency	Relative_Freq	Cum_Freq
0	48.00	1	0.970874	0.970874
1	61.08	1	0.970874	1.941748
2	55.68	1	0.970874	2.912621
3	81.70	1	0.970874	3.883495
4	51.57	1	0.970874	4.854369
...	...	...	...	...
98	73.00	9	8.737864	170.873786
99	52.00	9	8.737864	179.611650
100	67.00	9	8.737864	188.349515
101	63.00	10	9.708738	198.058252
102	62.00	11	10.679612	208.737864

103 rows × 4 columns

In [6]:
```
obj.uniAnalysis(dataset,Quan)
```

```
C:\Users\Lenovo\Anaconda3\lib\site-packages\numpy\lib\function_base.py:3826: RuntimeWarning: Invalid value encountered
in percentile
  interpolation=interpolation)
```

Out[6]:

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
Mean	108	67.3034	66.3332	66.3702	72.1006	62.2782	288655
Median	108	67	65	66	71	62	265000
Mode	1	62	63	65	60	56.7	300000
25th	54.5	60.6	60.9	61	60	57.945	NaN
50th	108	67	65	66	71	62	NaN
75th	161.5	75.7	73	72	83.5	66.255	NaN
99th	212.86	87	91.86	83.86	97	76.1142	NaN
100th	215	89.4	97.7	91	98	77.89	NaN
IQR	107	15.1	12.1	11	23.5	8.31	NaN
1.5IQR	160.5	22.65	18.15	16.5	35.25	12.465	NaN
Lesser	-106	37.95	42.75	44.5	24.75	45.48	NaN
Greater	1	53.05	54.85	55.5	48.25	53.79	NaN
Min	-106	15.1	12.1	11	23.5	8.31	265000
Max	215	89.4	97.7	91	98	77.89	300000

In [7]:
```
dataset.isnull().sum()
```

Out[7]:
```
sl_no             0
gender            0
ssc_p             0
ssc_b             0
hsc_p             0
hsc_b             0
hsc_s             0
degree_p          0
degree_t          0
workex            0
etest_p           0
specialisation    0
mba_p             0
status            0
salary           67
dtype: int64
```

In [8]:
```
dataset["salary"]=dataset["salary"].fillna(0)
```

In [9]:
```
obj.uniAnalysis(dataset,Quan)
```

Out[9]:

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
Mean	108	67.3034	66.3332	66.3702	72.1006	62.2782	198702
Median	108	67	65	66	71	62	240000
Mode	1	62	63	65	60	56.7	0
25th	54.5	60.6	60.9	61	60	57.945	0
50th	108	67	65	66	71	62	240000
75th	161.5	75.7	73	72	83.5	66.255	282500
99th	212.86	87	91.86	83.86	97	76.1142	629000
100th	215	89.4	97.7	91	98	77.89	940000
IQR	107	15.1	12.1	11	23.5	8.31	282500
1.5IQR	160.5	22.65	18.15	16.5	35.25	12.465	423750
Lesser	-106	37.95	42.75	44.5	24.75	45.48	-423750
Greater	1	53.05	54.85	55.5	48.25	53.79	-141250
Min	-106	15.1	12.1	11	23.5	8.31	-423750
Max	215	89.4	97.7	91	98	77.89	940000

In [ ]:
```

```