

```
In [1]: import pandas as pd
```

```
In [4]: examdata = pd.read_table("adminsheet.txt", header=None)
examdata
```

C:\Users\Alekhya\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: FutureWarning: read_table is deprecated, use read_csv instead, passing sep='\t'.
 """Entry point for launching an IPython kernel.

Out[4]:

	0
0	34.62365962451697,78.0246928153624,0
1	30.28671076822607,43.89499752400101,0
2	35.84740876993872,72.90219802708364,0
3	60.18259938620976,86.30855209546826,1
4	79.0327360507101,75.3443764369103,1
5	45.08327747668339,56.3163717815305,0
6	61.10666453684766,96.51142588489624,1
7	75.02474556738889,46.55401354116538,1
8	76.09878670226257,87.42056971926803,1
9	84.43281996120035,43.53339331072109,1
10	95.86155507093572,38.22527805795094,0
11	75.01365838958247,30.60326323428011,0
12	82.30705337399482,76.48196330235604,1
13	69.36458875970939,97.71869196188608,1
14	39.53833914367223,76.03681085115882,0
15	53.9710521485623,89.20735013750205,1
16	69.07014406283025,52.74046973016765,1
17	67.94685547711617,46.67857410673128,0
18	70.66150955499435,92.92713789364831,1
19	76.97878372747498,47.57596364975532,1
20	67.37202754570876,42.83843832029179,0
21	89.67677575072079,65.79936592745237,1
22	50.534788289883,48.85581152764205,0
23	34.21206097786789,44.20952859866288,0
24	77.9240914545704,68.9723599933059,1
25	62.27101367004632,69.95445795447587,1
26	80.1901807509566,44.82162893218353,1
27	93.114388797442,38.80067033713209,0
28	61.83020602312595,50.25610789244621,0
29	38.78580379679423,64.99568095539578,0
...	...

0

69	66.74671856944039,60.99139402740988,1
70	32.72283304060323,43.30717306430063,0
71	64.0393204150601,78.03168802018232,1
72	72.34649422579923,96.22759296761404,1
73	60.45788573918959,73.09499809758037,1
74	58.84095621726802,75.85844831279042,1
75	99.82785779692128,72.36925193383885,1
76	47.26426910848174,88.47586499559782,1
77	50.45815980285988,75.80985952982456,1
78	60.45555629271532,42.50840943572217,0
79	82.22666157785568,42.71987853716458,0
80	88.9138964166533,69.80378889835472,1
81	94.83450672430196,45.69430680250754,1
82	67.31925746917527,66.58935317747915,1
83	57.23870631569862,59.51428198012956,1
84	80.36675600171273,90.96014789746954,1
85	68.46852178591112,85.59430710452014,1
86	42.0754545384731,78.84478600148043,0
87	75.47770200533905,90.42453899753964,1
88	78.63542434898018,96.64742716885644,1
89	52.34800398794107,60.76950525602592,0
90	94.09433112516793,77.15910509073893,1
91	90.44855097096364,87.50879176484702,1
92	55.48216114069585,35.57070347228866,0
93	74.49269241843041,84.84513684930135,1
94	89.84580670720979,45.35828361091658,1
95	83.48916274498238,48.38028579728175,1
96	42.2617008099817,87.10385094025457,1
97	99.31500880510394,68.77540947206617,1
98	55.34001756003703,64.9319380069486,1

99 rows × 1 columns

```
In [6]: examdata = pd.read_table("adminsheat.txt", header=None, sep=",")
examdata
```

C:\Users\Alekhya\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: FutureWarning: read_table is deprecated, use read_csv instead.
 """Entry point for launching an IPython kernel.

Out[6]:

	0	1	2
0	34.623660	78.024693	0
1	30.286711	43.894998	0
2	35.847409	72.902198	0
3	60.182599	86.308552	1
4	79.032736	75.344376	1
5	45.083277	56.316372	0
6	61.106665	96.511426	1
7	75.024746	46.554014	1
8	76.098787	87.420570	1
9	84.432820	43.533393	1
10	95.861555	38.225278	0
11	75.013658	30.603263	0
12	82.307053	76.481963	1
13	69.364589	97.718692	1
14	39.538339	76.036811	0
15	53.971052	89.207350	1
16	69.070144	52.740470	1
17	67.946855	46.678574	0
18	70.661510	92.927138	1
19	76.978784	47.575964	1
20	67.372028	42.838438	0
21	89.676776	65.799366	1
22	50.534788	48.855812	0
23	34.212061	44.209529	0
24	77.924091	68.972360	1
25	62.271014	69.954458	1
26	80.190181	44.821629	1
27	93.114389	38.800670	0
28	61.830206	50.256108	0
29	38.785804	64.995681	0
...

	0	1	2
69	66.746719	60.991394	1
70	32.722833	43.307173	0
71	64.039320	78.031688	1
72	72.346494	96.227593	1
73	60.457886	73.094998	1
74	58.840956	75.858448	1
75	99.827858	72.369252	1
76	47.264269	88.475865	1
77	50.458160	75.809860	1
78	60.455556	42.508409	0
79	82.226662	42.719879	0
80	88.913896	69.803789	1
81	94.834507	45.694307	1
82	67.319257	66.589353	1
83	57.238706	59.514282	1
84	80.366756	90.960148	1
85	68.468522	85.594307	1
86	42.075455	78.844786	0
87	75.477702	90.424539	1
88	78.635424	96.647427	1
89	52.348004	60.769505	0
90	94.094331	77.159105	1
91	90.448551	87.508792	1
92	55.482161	35.570703	0
93	74.492692	84.845137	1
94	89.845807	45.358284	1
95	83.489163	48.380286	1
96	42.261701	87.103851	1
97	99.315009	68.775409	1
98	55.340018	64.931938	1

99 rows × 3 columns

In [8]: examdata.isnull().sum()

Out[8]: 0 0
1 0
2 0
dtype: int64

```
In [9]: x = examdata[[0,1]]
x.head()
```

```
Out[9]:
```

	0	1
0	34.623660	78.024693
1	30.286711	43.894998
2	35.847409	72.902198
3	60.182599	86.308552
4	79.032736	75.344376

```
In [11]: y = examdata[2]
y.head()
```

```
Out[11]: 0    0
1    0
2    0
3    1
4    1
Name: 2, dtype: int64
```

```
In [12]: from sklearn.linear_model import LogisticRegression
```

```
In [13]: log = LogisticRegression()
```

```
In [14]: log.fit(x,y)
```

C:\Users\Alekhya\Anaconda3\lib\site-packages\sklearn\linear_model\logistic.py:433: FutureWarning: Default solver will be changed to 'lbfgs' in 0.22. Specify a solver to silence this warning.
FutureWarning)

```
Out[14]: LogisticRegression(C=1.0, class_weight=None, dual=False, fit_intercept=True,
intercept_scaling=1, max_iter=100, multi_class='warn',
n_jobs=None, penalty='l2', random_state=None, solver='warn',
tol=0.0001, verbose=0, warm_start=False)
```

```
In [15]: pr = log.predict(x)
pr
```

```
Out[15]: array([0, 0, 0, 1, 1, 0, 1, 1, 1, 1, 1, 0, 1, 1, 0, 1, 1, 1, 1, 1,
0, 0, 1, 1, 1, 1, 1, 0, 1, 1, 1, 1, 0, 1, 0, 1, 1,
0, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 0, 1, 1, 1, 1, 0, 0, 0, 0, 0,
1, 0, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1,
1, 0, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1], dtype=int64)
```

```
In [16]: from sklearn.metrics import accuracy_score, confusion_matrix
```

```
In [17]: accuracy_score(y,pr)
```

```
Out[17]: 0.8686868686868687
```

```
In [19]: confusion_matrix(y,pr)
```

```
Out[19]: array([[27, 13],  
               [ 0, 59]], dtype=int64)
```

```
In [20]: 27+59
```

```
Out[20]: 86
```

```
In [21]: examdata.shape
```

```
Out[21]: (99, 3)
```

```
In [27]: log.predict([[35.6,70.8],[45,78]])
```

```
Out[27]: array([0, 1], dtype=int64)
```

```
In [29]: log.predict([[35.847409,72.902198]])
```

```
Out[29]: array([0], dtype=int64)
```

```
In [ ]:
```