Testing the model

```
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import seaborn as sns
```

```
data=pd.read_csv('/content/drive/MyDrive/data/Admission_Predict.csv')
```

```
data.head()
```

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research	Chance of Admit
0	1	337	118	4	4.5	4.5	9.65	1	0.92
1	2	324	107	4	4.0	4.5	8.87	1	0.76
2	3	316	104	3	3.0	3.5	8.00	1	0.72
3	4	322	110	3	3.5	2.5	8.67	1	0.80
4	5	314	103	2	2.0	3.0	8.21	0	0.65

```
x=data.drop(['Chance of Admit '],axis=1)
y=data['Chance of Admit ']
```

```
from sklearn.model_selection import train_test_split
x_train, x_test, y_train, y_test = train_test_split(x, y, test_size=0.15)
```

```
x_train
```

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research
335	336	325	111	4	4.0	4.5	9.11	1
105	106	316	110	3	4.0	4.5	8.78	1
67	68	316	107	2	3.5	3.5	8.64	1
326	327	299	100	3	2.0	2.0	8.02	0
240	241	296	101	1	2.5	3.0	7.68	0

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research
...	...	...	...	...	...	...	...	...
151	152	332	116	5	5.0	5.0	9.28	1
314	315	305	105	2	3.0	4.0	8.13	0
22	23	328	116	5	5.0	5.0	9.50	1
8	9	302	102	1	2.0	1.5	8.00	0
51	52	312	100	2	1.5	3.5	7.90	1

340 rows × 8 columns

```
y_train
```

```
335    0.83
105    0.69
67     0.57
326    0.63
240    0.60
       ...
151    0.94
314    0.66
22     0.94
8      0.50
51     0.56
Name: Chance of Admit , Length: 340, dtype: float64
```

```
x_test
```

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research
369	370	301	98	1	2.0	3.0	8.03	1
172	173	322	110	4	4.0	5.0	9.13	1
110	111	305	108	5	3.0	3.0	8.48	0
340	341	312	107	3	3.0	3.0	8.46	1
74	75	314	106	3	3.0	5.0	8.90	0

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research
78	79	296	95	2	3.0	2.0	7.54	1
265	266	313	102	3	2.5	2.5	8.68	0
251	252	316	99	2	2.5	3.0	9.00	0
115	116	310	106	4	4.5	4.5	9.04	1
21	22	325	114	4	3.0	2.0	8.40	0
133	134	323	112	5	4.0	4.5	8.78	0
85	86	319	103	4	4.5	3.5	8.66	0
145	146	320	113	2	2.0	2.5	8.64	1
18	19	318	110	3	4.0	3.0	8.80	0
239	240	299	100	1	1.5	2.0	7.89	0
348	349	302	99	1	2.0	2.0	7.25	0
88	89	314	108	3	4.5	3.5	8.14	0
217	218	321	109	4	4.0	4.0	9.13	1
342	343	308	106	3	3.0	3.0	8.24	0
205	206	295	99	2	2.5	3.0	7.65	0
92	93	298	98	2	4.0	3.0	8.03	0
128	129	326	112	3	3.5	3.0	9.10	1
301	302	319	108	2	2.5	3.0	8.76	0
222	223	324	113	4	4.5	4.0	8.79	0

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research
270	271	306	105	2	2.5	3.0	8.22	1
91	92	299	97	3	5.0	3.5	7.66	0
230	231	313	104	3	4.0	4.5	8.65	0
300	301	309	106	2	2.5	2.5	8.00	0
297	298	320	120	3	4.0	4.5	9.11	0
181	182	305	107	2	2.5	2.5	8.42	0
49	50	327	111	4	3.0	4.0	8.40	1
113	114	320	110	2	4.0	3.5	8.56	0
333	334	319	108	3	3.0	3.5	8.54	1
102	103	314	106	2	4.0	3.5	8.25	0
266	267	312	105	2	2.0	2.5	8.45	0
204	205	298	105	3	3.5	4.0	8.54	0
29	30	310	99	2	1.5	2.0	7.30	0
374	375	315	105	2	2.0	2.5	7.65	0
75	76	329	114	2	2.0	4.0	8.56	1
170	171	312	101	2	2.5	3.5	8.04	1
225	226	296	99	2	2.5	2.5	8.03	0
31	32	327	103	3	4.0	4.0	8.30	1
93	94	301	97	2	3.0	3.0	7.88	1

	Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research
153	154	324	105	3	3.0	4.0	8.75	0
14	15	311	104	3	3.5	2.0	8.20	1
391	392	318	106	3	2.0	3.0	8.65	0
220	221	313	103	3	4.0	4.0	8.75	0
228	229	318	112	3	4.0	3.5	8.67	0
396	397	325	107	3	3.0	3.5	9.11	1
16	17	317	107	3	4.0	3.0	8.70	0
11	12	327	111	4	4.0	4.5	9.00	1
157	158	309	104	2	2.0	2.5	8.26	0
96	97	306	100	2	3.0	3.0	8.00	0
5	6	330	115	5	4.5	3.0	9.34	1
94	95	303	99	3	2.0	2.5	7.66	0
174	175	321	111	4	4.0	4.0	8.97	1
44	45	326	113	5	4.5	4.0	9.40	1
136	137	312	103	3	5.0	4.0	8.45	0
368	369	298	92	1	2.0	2.0	7.88	0
4	5	314	103	2	2.0	3.0	8.21	0

```
y_test
369    0.67
172    0.86
110    0.61
340    0.75
74     0.74
```

```
78     0.44
265    0.71
251    0.70
115    0.66
21     0.70
133    0.79
85     0.76
145    0.81
18     0.63
239    0.59
348    0.57
88     0.64
217    0.85
342    0.58
205    0.57
92     0.34
128    0.84
301    0.66
222    0.76
270    0.72
91     0.38
230    0.73
300    0.62
297    0.86
181    0.71
49     0.78
113    0.72
333    0.71
102    0.62
266    0.72
204    0.69
29     0.54
374    0.39
75     0.72
170    0.68
225    0.61
31     0.74
93     0.44
153    0.79
14     0.61
391    0.71
220    0.76
228    0.71
396    0.84
16     0.66
11     0.84
157    0.65
96     0.48
5      0.90
94     0.36
174    0.87
44     0.91
136    0.76
368    0.51
4      0.65
Name: Chance of Admit , dtype: float64
```