

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
9995	9996	15606229	Obijaku	771	France	Male	39	5	0.00	2	1	0	96270.64	0
9996	9997	15569892	Johnstone	516	France	Male	35	10	57369.61	1	1	1	101699.77	0
9997	9998	15584532	Liu	709	France	Female	36	7	0.00	1	0	1	42085.58	1
9998	9999	15682355	Sabbatini	772	Germany	Male	42	3	75075.31	2	1	0	92888.52	1
9999	10000	15628319	Walker	792	France	Female	28	4	130142.79	1	1	0	38190.78	0

	RowNumber	CustomerId	CreditScore	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
count	10000.00000	1.000000e+04	10000.000000	10000.000000	10000.000000	10000.000000	10000.000000	10000.00000	10000.000000	10000.000000	10000.000000
mean	5000.50000	1.589094e+07	850.528800	38.921800	5.012800	78485.889288	1.530200	0.70550	0.515100	100090.239881	0.203700
std	2886.89588	7.193819e+04	96.853299	10.487808	2.892174	62397.405202	0.581654	0.45584	0.499797	57510.492818	0.402789
min	1.00000	1.558570e+07	350.000000	18.000000	0.000000	0.000000	1.000000	0.00000	0.000000	11.580000	0.000000
25%	2500.75000	1.582853e+07	584.000000	32.000000	3.000000	0.000000	1.000000	0.00000	0.000000	51002.110000	0.000000
50%	5000.50000	1.589074e+07	852.000000	37.000000	5.000000	97198.540000	1.000000	1.00000	1.000000	100193.915000	0.000000
75%	7500.25000	1.575323e+07	718.000000	44.000000	7.000000	127844.240000	2.000000	1.00000	1.000000	149388.247500	0.000000
max	10000.00000	1.581589e+07	850.000000	92.000000	10.000000	250898.090000	4.000000	1.00000	1.000000	199992.480000	1.000000

df.isnull()

	RowNumber	CustomerId	Surname	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
0	False	False	False	False	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9995	False	False	False	False	False	False	False	False	False	False	False	False	False	False
9996	False	False	False	False	False	False	False	False	False	False	False	False	False	False
9997	False	False	False	False	False	False	False	False	False	False	False	False	False	False
9998	False	False	False	False	False	False	False	False	False	False	False	False	False	False
9999	False	False	False	False	False	False	False	False	False	False	False	False	False	False

RowNumber	0
CustomerId	0
Surname	0
CreditScore	0
Geography	0
Gender	0
Age	0
Tenure	0
Balance	0
NumOfProducts	0
HasCrCard	0
IsActiveMember	0
EstimatedSalary	0
Exited	0

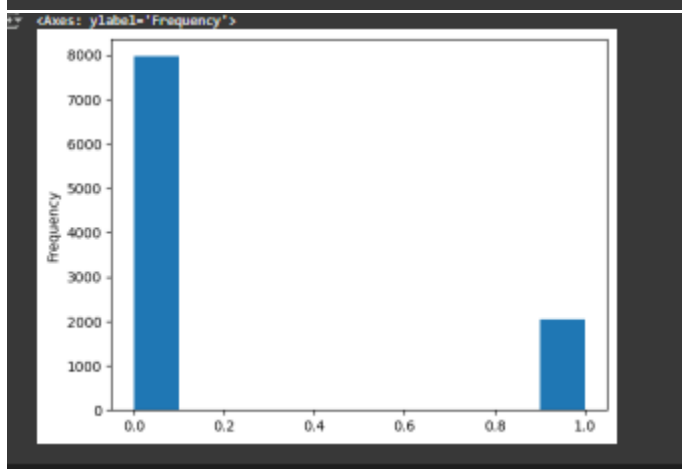
	CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
0	619	France	Female	42	2	0.00	1	1	1	101348.88	1
1	608	Spain	Female	41	1	83807.86	1	0	1	112542.58	0
2	502	France	Female	42	8	159660.80	3	1	0	113931.57	1
3	699	France	Female	39	1	0.00	2	0	0	93826.63	0
4	850	Spain	Female	43	2	125510.82	1	1	1	79084.10	0

CreditScore	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited	Geography_Germany	Geography_Spain	Gender_Male
619	42	2	0.00	1	1	1	101348.88	1	False	False	False
608	41	1	83807.86	1	0	1	112542.58	0	False	True	False
502	42	8	159660.80	3	1	0	113931.57	1	False	False	False
699	39	1	0.00	2	0	0	93826.63	0	False	False	False
850	43	2	125510.82	1	1	1	79084.10	0	False	True	False

```
[ 'Exited' ].value_counts() #Imbalanced Data
```

```
count
Exited
0    7983
1    2037
```

```
dtype: int64
```



CreditScore	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Geography_Germany	Geography_Spain	Gender_Male	
850	81	5	0.000000	2	1	1	44827.470000	False	False	True	1
350	39	0	109733.200000	2	0	0	123602.110000	True	False	True	1
	40	0	111098.850000	1	1	1	172321.210000	False	False	False	1
	51	10	0.000000	1	1	1	125823.790000	False	False	True	1
	54	1	152677.480000	1	1	1	191973.490000	False	True	True	1
...	...	...	...	...	...	...	...	...	...	...	
384	46	6	409.855222	1	0	0	157315.717371	False	True	False	1
386	43	6	0.000000	1	1	0	157180.999953	False	False	False	1
	53	1	131955.070000	1	1	1	62514.650000	False	True	False	1
387	53	1	153030.746479	1	0	1	191967.118711	False	True	True	1
388	45	6	128806.802855	1	1	0	146435.798513	False	False	False	1

```
5928 rows x 11 columns
```

