

```
import pandas as pd
from sklearn.preprocessing import LabelEncoder
from sklearn.linear_model import LogisticRegression
from sklearn.model_selection import train_test_split
from sklearn.metrics import accuracy_score

data = pd.read_csv("/content/titanic.csv")
print(data)
```

	PassengerId	Survived	Pclass	\
0	1	0	3	
1	2	1	1	
2	3	1	3	
3	4	1	1	
4	5	0	3	
..	
886	887	0	2	
887	888	1	1	
888	889	0	3	
889	890	1	1	
890	891	0	3	

	Name	Sex	Age
SibSp \			
0	Braund, Mr. Owen Harris	male	22.0
1			
1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0
1			
2	Heikkinen, Miss. Laina	female	26.0
0			
3	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0
1			
4	Allen, Mr. William Henry	male	35.0
0			
..
...			
886	Montvila, Rev. Juozas	male	27.0
0			
887	Graham, Miss. Margaret Edith	female	19.0
0			
888	Johnston, Miss. Catherine Helen "Carrie"	female	NaN
1			
889	Behr, Mr. Karl Howell	male	26.0
0			
890	Dooley, Mr. Patrick	male	32.0
0			

	Parch	Ticket	Fare	Cabin	Embarked
0	0	A/5 21171	7.2500	NaN	S
1	0	PC 17599	71.2833	C85	C

2	0	STON/O2.	3101282	7.9250	NaN	S
3	0		113803	53.1000	C123	S
4	0		373450	8.0500	NaN	S
...
886	0		211536	13.0000	NaN	S
887	0		112053	30.0000	B42	S
888	2	W./C.	6607	23.4500	NaN	S
889	0		111369	30.0000	C148	C
890	0		370376	7.7500	NaN	Q

[891 rows x 12 columns]

```
le=LabelEncoder()
le.fit(data["Sex"])
data["Sex"]=le.transform(data["Sex"])
print(data["Sex"])
```

0	1
1	0
2	0
3	0
4	1
...	...
886	1
887	0
888	0
889	1
890	1

Name: Sex, Length: 891, dtype: int64

```
data["Age"].fillna(data["Age"].mean(), inplace=True)
x = data[["Pclass", "Sex", "Age", "SibSp", "Parch", "Fare"]]
y = data["Survived"]
```

```
model = LogisticRegression()
x_train, x_test, y_train, y_test =
train_test_split(x,y,random_state=10,test_size=0.1)
model.fit(x_train,y_train)
y_pred = model.predict(x_test)
print(accuracy_score(y_test,y_pred))
```

0.8