Mobile Price Classification -By Nithin Reddy

```
import pandas as pd
```

```
data=pd.read_csv("https://www.dropbox.com/s/iy0w25eunwx2qlq/MobilePriceClassification.csv?dl=1")
```

```
data
```

	battery_power	blue	clock_speed	dual_sim	fc	four_g	int_memory	m_dep	mobile_wt	n_cores	...	px_height	px
0	842	0	2.2	0	1	0	7	0.6	188	2	...	20	
1	1021	1	0.5	1	0	1	53	0.7	136	3	...	905	
2	563	1	0.5	1	2	1	41	0.9	145	5	...	1263	
3	615	1	2.5	0	0	0	10	0.8	131	6	...	1216	
4	1821	1	1.2	0	13	1	44	0.6	141	2	...	1208	
...	...	...	...	...	...	...	...	...	...	...	...	...	
1995	794	1	0.5	1	0	1	2	0.8	106	6	...	1222	
1996	1965	1	2.6	1	0	0	39	0.2	187	4	...	915	
1997	1911	0	0.9	1	1	1	36	0.7	108	8	...	868	
1998	1512	0	0.9	0	4	1	46	0.1	145	5	...	336	
1999	510	1	2.0	1	5	1	45	0.9	168	6	...	483	

2000 rows × 21 columns

```
data.columns
```

```
Index(['battery_power', 'blue', 'clock_speed', 'dual_sim', 'fc', 'four_g',
       'int_memory', 'm_dep', 'mobile_wt', 'n_cores', 'pc', 'px_height',
       'px_width', 'ram', 'sc_h', 'sc_w', 'talk_time', 'three_g',
       'touch_screen', 'wifi', 'price_range'],
      dtype='object')
```

```
X=data.drop("price_range",axis=1)
```

```
y=data["price_range"]
```

```
from sklearn.model_selection import train_test_split
```

```
X_train,X_test,y_train,y_test=train_test_split(X,y,test_size=0.3,shuffle=True)
```

```
((X_train.shape,y_train.shape),(X_test.shape,y_test.shape))
```

```
(((1400, 20), (1400,)), ((600, 20), (600,)))
```

```
from sklearn.linear_model import LogisticRegression
```

```
model=LogisticRegression()
```

```
model.fit(X_train,y_train)
```

```
/usr/local/lib/python3.7/dist-packages/sklearn/linear_model/_logistic.py:818: ConvergenceWarning: lbfgs failed to conve
STOP: TOTAL NO. of ITERATIONS REACHED LIMIT.

Increase the number of iterations (max_iter) or scale the data as shown in:
    https://scikit-learn.org/stable/modules/preprocessing.html
Please also refer to the documentation for alternative solver options:
    https://scikit-learn.org/stable/modules/linear_model.html#logistic-regression
  extra_warning_msg=_LOGISTIC_SOLVER_CONVERGENCE_MSG,
LogisticRegression()
```

```
from sklearn.metrics import accuracy_score

predictions=model.predict(X_test)

accuracy_score(y_test,predictions)
```

```
0.6266666666666667
```

THANK YOU