

```
# To import libraries
import pandas as pd

# To import dataset and print first 10 records
df=pd.read_csv("/content/sample_data/Pr.csv")
df.head(10)
```

	Height (in cms)	Weight (in kgs)	Weightlifting
0	158	58	M
1	158	59	M
2	158	63	M
3	160	59	M
4	160	60	M
5	163	60	M
6	163	61	M
7	160	64	L
8	163	64	L
9	165	61	L

```
labels_lst=list(df['Weightlifting'])
print(labels_lst)
```

```
['M', 'M', 'M', 'M', 'M', 'M', 'M', 'L', 'L', 'L', 'L', 'L', 'L', 'L', 'L', 'L', 'L']
```

```
# Converting features(height and weight) into list of tuples and printing  
first 9 elements of list  
features=list(zip(df['Height (in cms)'],df['Weight (in kgs)']))  
print(features[:9])
```

```
[(158, 58), (158, 59), (158, 63), (160, 59), (160, 60), (163, 60), (163, 61), (160, 64), (163, 64)]
```

```
from sklearn.model_selection import train_test_split  
x_train, x_test, y_train, y_test=train_test_split(features, labels_lst,  
                                                  test_size=0.2,random_state=3)  
from sklearn.neighbors import KNeighborsClassifier  
knn=KNeighborsClassifier(n_neighbors=3, weights="distance", metric="euclidean")  
knn.fit(x_train,y_train)
```

```
KNeighborsClassifier(metric='euclidean', n_neighbors=3, weights='distance')
```

```
from sklearn.metrics import accuracy_score  
y_pred=knn.predict(x_test)  
print("Accuracy of test set=",accuracy_score(y_test, y_pred)*100)
```

```
Accuracy of test set= 100.0
```

```
print(knn.predict([[161,61]]))
```

```
['M']
```

