

## Jobsheet KNN

```
import pandas as pd
import numpy as np

1. filename = 'lulus1.csv'
   names = ['ipk', 'pelatihan', 'prestasi', 'forum', 'organisasi', 'lulus cepat']

   predikat = pd.read_csv(filename, names=names)
   predikat

2. predikat.head()

3. predikat.info()

4. x = predikat.drop(["lulus cepat"], axis=1)
   x.head()

5. y = predikat["lulus cepat"]
   y.head()

6. from sklearn.model_selection import train_test_split

   x_train, x_test, y_train, y_test = train_test_split(x,y,test_size=0.20)

   from sklearn.preprocessing import StandardScaler
   scaler = StandardScaler()
   scaler.fit(x_train)

   x_train = scaler.transform(x_train)
   x_test = scaler.transform(x_test)

7. from sklearn.neighbors import KNeighborsClassifier

   knn = KNeighborsClassifier(n_neighbors=3)

   knn.fit(x_train, y_train)

8.
```

```
y_pred = knn.predict(x_test)  
y_pred
```

9.

```
knn.predict_proba(x_test)
```

10.

```
from sklearn.metrics import classification_report, confusion_matrix
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print(confusion_matrix(y_test,y_pred))
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11.

```
print(classification_report(y_test,y_pred))
```

12.