TD.:		_ DIV./SEC.: SUBJECT:	- NOLL NO	800_ 11
s. No.	Date	Tiel	-	
1.	24.04.25	Explosing The De /	Page No.	Teacher's Sign/Rema
		Exploring The Deep Learning Platforms.	_	1
2.	7.08.25	Implement a classifier using open- Source Dataget.		1.
		sunce salaget.	>	A P
3.	7.08.2025	study of the classifier with respect to statistical parameters.	1	1/14/8/
THE PERSON NAMED IN				/
4. 1	4.08.2025	Build a single Food Forward neural retwork to regognise handwritten		
	n	characters.	1	
		COUNTRIES.		
				100

HOLL NO .: 008

EDD 2: IMPLEMENT A CLASSIFIER 1.08.2025 USING OPEN-SOURCE DATASET. To implement a classifier using Open-Source Every scheam, neclel selection importabletabert spit ALCIDRITHM POUNT DESCRIPTION MOST MOST ALCIDRITHM SECRET SECRETARIAN MOST ALCOHOLIST THE Exist data set.

3) Split The dataset into training and testing sets.) Preprocess the data of necessary is a Train a K-NN classifier on the training data. Cen- 123 Predict the class Cabels on the test data. * Evaluate the classifier using accuracy score. x-test = scalen transform (x-test) Runs Knoelghbers (lassifice (n_neg/kgrs = 3) kuntit (x-kain, y-train) y-pred = knn. preduct (x-test) accuracy = accuracy-score (y-test, y-prod) paint ("Accuracy of K-wasifier on I had oblaset:, accusacy). Accuracy of K-NN classifien on Isis doloset: 1.0

PSEUDOCODE!

BEGIN

Load the Iris dataset.

Split the dataset into training and test sets

Initialize the k-NN classifier with k neighbors

Town the classifier using the training set.

Predict the class Cabels on the test set.

Compute the accuracy of the model.

Print the accuracy.

END.

brom sklearn datasets import load in from sklearn. model - selection import train-test-sply from stateann. preprocessing import standard Scales from sklean. neighbors import KNeighbors Clausifica from sklean, metrics import accuracy store. 928 2 load isis () X2 Prisidata if natob est 220000090 (x. troin, x -test, y-train, y-test = train_test-split(x, y, test_8ize

steb 20-2; soundom_8tute=42) Scaler = Standard Scaler ()

X-train = Scaler. fit_transform (x-train) x-test = Scaler. transform (x-test). knn = KNeighbors Classifier (n-neighbors = 3) knn.fit (x-train, y-train) y-pred = knn. predut (x-test) accuracy = accuracy-score (y-test, y-pred) Print ("Accuracy of K-NN classifier on I six dataset: accuracy) Output! Aceuracy of K-NN classifier on Iris dataset: 1.0

PSEUDOCEDE : Becom dateset and testing sets. Sturdandize The famous. Regression, K-wn, SVM.
Inthalize classifiers (legistic Regression, Decision Tree) FOR each classifien: Took classifies with training dots Redict on test data. Calculate Accuracy, precision, Confustion · throne west? 907 JUB FOR Display and compare secults END. Therefore the Emplementation of a classifier using open-source dataset is Completed Successfully.

```
s Settings Help
                               opensource.ipynb
  Untitled.ipynb
                                                                                                                                              Notebook 2 # Python 3 (ipykernel)
  B + %
              Requirement already satisfied: python-dateutil>=2.8.2 in /opt/tlih/user/lib/python3.10/site-packages (from pandas) (2.9.0.post0)
                                                                                                                                                                                     0
              Requirement already satisfied: pytz>=2020.1 in /home/jupyter-ra2311047010008/.local/lib/python3.10/site-packages (from pandas) (2025.2)
              Requirement already satisfied: tzdata>=2022.7 in /home/jupyter-ra2311047010008/.local/lib/python3.10/site-packages (from pandas) (2025.2)
              Requirement already satisfied: six>=1.5 in /opt/tljh/user/lib/python3.10/site-packages (from python-dateutil>=2.8.2->pandas) (1.16.0)
                                                                                                                                                                                      Ħ
              Note: you may need to restart the kernel to use updated packages.
             from sklearn.datasets import load iris
              from sklearn.model selection import train test split
              from sklearn.neighbors import KNeighborsClassifier
              from sklearn.metrics import accuracy_score
             iris = load iris()
             X = iris.data
             y = iris.target
             X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random state=42)
             clf = KNeighborsClassifier(n_neighbors=5)
             clf.fit(X train, y train)
             y_pred = clf.predict(X test)
             accuracy = accuracy_score(y_test, y_pred)
              print(f"Accuracy of KNN classifier: {accuracy:.2f}")
              Accuracy of KNN classifier: 1.00
```

(ipykernel) I Idle Mem: 314 98 MR