Centurion University
Shaping Lives... Empowering Communities...

School: ..... Campus: .....

Academic Year: ..... Subject Name: ..... Subject Code: .....

Semester: ..... Program: ..... Branch: ..... Specialization: .....

Date: .....

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement :

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

```
from sklearn import datasets
from sklearn.model_selection import train_test_split
from sklearn.svm import SVC
from sklearn.metrics import accuracy_score, confusion_matrix, classification_report

iris = datasets.load_iris()
X = iris.data
y = iris.target

x = X[y!=2]
y=y[y!=2]

X_train, X_test, y_train, y_test = train_test_split(x, y, test_size=0.3, random_state=42)

model = SVC(kernel='linear', C=1)
model.fit(X_train, y_train)

y_pred = model.predict(X_test)

# Evaluation
print("Accuracy: ", accuracy_score(y_test, y_pred))
print("Confusion Matrix:\n", confusion_matrix(y_test, y_pred))
print("Classification Report:\n", classification_report(y_test, y_pred))
```


**As applicable according to the experiment.*
Two sheets per experiment (10-20) to be used.

* Implementation Phase: Final Output (no error)

SVC

▼ Parameters

C	1
kernel	'linear'
degree	3
gamma	'scale'
coef0	0.0
shrinking	True
probability	False
tol	0.001
cache_size	200
class_weight	None
verbose	False
max_iter	-1
decision_function_shape	'ovr'
break_ties	False
random_state	None

```
Accuracy:  1.0
Confusion Matrix:
 [[17  0]
 [ 0 13]]
Classification Report:
              precision    recall  f1-score   support

           0       1.00      1.00      1.00        17
           1       1.00      1.00      1.00        13

    accuracy                           1.00        30
   macro avg       1.00      1.00      1.00        30
weighted avg       1.00      1.00      1.00        30
```

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty:

**As applicable according to the experiment. Two sheets per experiment (10-20) to be used.*