Module-5_weekend_Task:

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1.Create a class BankAccount in Python with private attributes __accountno,__name, __balance.

Add

parameterized constructor

methods:

deposit(amount)

withdraw(amount)

set_accountno

get_accountno

set_name

get_name

get_balance()

set_balance()

Output:

```
PS C:\Users\yuvaraj.k\Desktop\weekend_Task> & "C:/Program Files/Python312/python.exe" c:/Users/yuvaraj.k/Desktop/weekend_Task/Bankaccount.py

Account No: 87546789
Name: Yuvaraj
Balance: ₹ 5000.0
Deposited: ₹2000. New Balance: ₹7000.0
Withdrawn: ₹1000. New Balance: ₹6000.0
Updated Name: Vicky
```

2.How will you define a static method in Python?Explore and give an example.

Output:

In Python, you define a static method using the @staticmethod decorator.

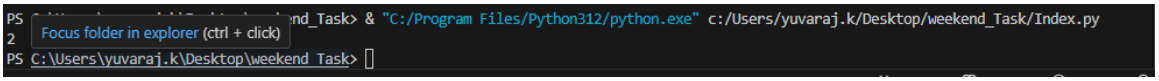
The method doesn’t use instance (self) or class (cls) variables.

```
PS C:\Users\yuvaraj.k\Desktop\weekend_Task> & "C:/Program Files/Python312/python.exe" c:/Users/yuvaraj.k/Desktop/weekend_Task/Temperature.py

25°C in Fahrenheit: 77.0
77°F in Celsius: 25.0
```

3.Give examples for dunder methods in Python other than __str__ and __init__ .

Output:



4. Explore some supervised and unsupervised models in ML.

Code:

Supervised learning:

```
from sklearn.datasets import load_iris

from sklearn.linear_model import LogisticRegression

from sklearn.model_selection import train_test_split

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)


model = LogisticRegression(max_iter=200)

model.fit(X_train, y_train)


y_pred = model.predict(X_test)


accuracy = accuracy_score(y_test, y_pred)

print("Model Accuracy:", accuracy)
```

Unsupervised learning:

```
from sklearn.datasets import load_iris

from sklearn.cluster import KMeans

import matplotlib.pyplot as plt


iris = load_iris()

X = iris.data


kmeans = KMeans(n_clusters=3, random_state=42)

kmeans.fit(X)


print("Cluster labels:", kmeans.labels_)


plt.scatter(X[:, 0], X[:, 1], c=kmeans.labels_, cmap='viridis')

plt.title("KMeans Clustering (Iris Dataset)")

plt.xlabel("Feature 1")

plt.ylabel("Feature 2")

plt.show()
```

5.Implement Stack with class in Python.

Output: