**Module-III Machine Learning Assessment ( CU\_1.0)**

**Unit-I Data Manipulation with Pandas (Attempt Any 3)**

Q. 1. Create a Pandas DataFrame with below given two-dimensional list

[['Ram', 25], ['Ramesh', 30], ['Shyam', 26], ['Naresh', 22]] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q. 2. Create a Pandas DataFrame with below given dictionary object?

data = {'Subject':['Math', 'Physics', 'Chemistry'], 'Marks':[20, 21, 19]} \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q. 3. Create a JSON file for below object and Create a Pandas DataFrame using the created JSON file?

{"Courses":{"r1":"Spark"},"Fee":{"r1":"25000"},"Duration":{"r1":"50 Days"}} \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q. 4. Create a Pandas DataFrame using the link of .csv file shared below:

<https://raw.githubusercontent.com/MarczakIO/azure4everyone-samples/master/azure-data-factory-introduction/cars.csv>

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Q.5. For the below dictionary, create a Pandas DataFrame and select all rows with Percentage >=80.

record = {

'Name': ['Ankit', 'Amit', 'Aishwarya', 'Priyanka', 'Priya', 'Shaurya' ],

'Age': [21, 19, 20, 18, 17, 21],

'Stream': ['Math', 'Commerce', 'Science', 'Math', 'Math', 'Science'],

'Percentage': [88, 92, 95, 70, 65, 78] }

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Q.6. Create a DataFrame using below link:

<https://raw.githubusercontent.com/sivabalanb/Data-Analysis-with-Pandas-and-Python/master/nba.csv>

Remove all those players from DataFrame who are younger than 25 years of age.

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Q.7. Create a DataFrame using below link:

<https://raw.githubusercontent.com/ffzs/dataset/master/sales.csv>

Use pivot table method to identify dates on which maximum sale occurred?

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**Unit-II Python GUI - Tkinter (Attempt Any 1)**

1. Create Python Tkinter GUI program to add a button in your application using tkinter module.

2. Create Python GUI program to create hello button and Checkbutton widget using tkinter module.

3. Create Python Tkinter GUI program to Predict house prices (using Linear regression)

Dataset :

<https://github.com/Shreyansh81/House-PricePrediction/raw/main/Housing%20Information.csv>

**Unit-III Machine Learning (Attempt Any 2)**

Q. 1. Create Python Jupyter notebook of Sk-Learn program using Linear Regression(LR) technique to train a LR model for prediction of house prices?

Dataset:

<https://github.com/Shreyansh81/House-Price-Prediction/raw/main/Housing%20Information.csv>

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Q.2. Create Python Jupyter notebook of Sk-Learn program using Linear Regression(LR) to classify cancer samples diagnosed as Benign or Malignant

Dataset: <https://raw.githubusercontent.com/AgustinCdeCelis/Cancer-Logistic-Regression/main/data.csv>

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3. Create Python Jupyter notebook of Sk-Learn program using Support Vector Machine(SVM) to classify cancer samples diagnosed as Benign or Malignant

Dataset: <https://raw.githubusercontent.com/AgustinCdeCelis/Cancer-Logistic-Regression/main/data.csv>

4. Create Python Jupyter notebook of Sk-Learn program using K-means clustering to cluster the symptoms of patients' having heart disease.

Dataset: <https://raw.githubusercontent.com/mona-patra/FDP-5days/main/Day%202/heart.csv>

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---------------------------------------------------Best Of Luck ----------------------------------------------------------------------