Day_07 (DataFrame)

Example 48 :

Task:

Create a pandas Dataframe from numpy array of random numbers using np.random.rand

```python
import numpy as np
```

```python
pd.DataFrame(np.random.rand(5, 5),
             columns=['A', 'B','C','D','E'],
             index=[1,2,3,4,5])
```

```python
# Example 49 :
# Task:
    ## Create a dataframe of numpy array containing all zeros hint:use np.zeroes function
```

```python
A = np.zeros(3, dtype=[('A', 'i8'), ('B', 'f8')])
A
```

```python
pd.DataFrame(A)
```

Example 50 :

Task:

create a dataframe of series and get the values out of it explicitly and implicitly

```python
newData=pd.Series(['Muhammad Umair','Muhammad Usama','Muhammad Akram','Abdullah Tahir','Hamdan Ijaz'],
                  index=[5,10,15,106,54])
```

```python
newData
```

```python
# Explicit Indexing
newData[10]
```

```python
# Implicit Indexing
newData[1:3]
```

Example 51 :

Task:

use loc,iloc for explicit and implicit indexing

```python
# Explicit Indexing using loc
newData.loc[10]
```

```python
# Explicit Indexing using loc
newData.loc[10:106]
```

```python
# implicit Indexing using loc
newData.iloc[3]
```

```python
# Explicit Indexing using loc
newData.iloc[2:4]
```

```python
# Explicit Indexing using loc
newData.iloc[3]
```

Example 52 :

Task:

Access values of Dataframe like dictionary style indexing and like database column '.' method

```python
StudentsData=pd.DataFrame(['Muhammad Umair','Muhammad Usama','Muhammad Akram','Abdullah Tahir','Hamdan Ijaz'],
                          index=[5,10,15,106,54],columns=["names"])
```

```python
StudentsData
```

```python
StudentsData["names"]
```

```python
StudentsData.names
```

Example 53 :

Task:

create a Dataframe than convert columns to rows and print all the values from the Database

```python
stuDataframe=pd.DataFrame(students_Dict)
```

```python
stuDataframe.values
```

```python
stuDataframe.T
```

```python

```

```python

```