Jupyter notebook

```
import numpy as np
create an array
a = np.array([1,2,3,4,5])
print(a)

2d array
a = np.array([(1,2,3),(4,5,6)])
print(a)

3d array
a = np.array([(1,2,3,),(4,5,6),(87,8,9)])
print(a)


a = np.array([1,2,3,4,5,6,7],[8,9,10,11,12,13,14])
print(a)                    //print array
print(a[1,2])               //print 2 row's 3 element(indexed 0 starting)

arr = np.array([1,2,3,4,5,6,7,8,9,10])
print(arr[2:7])             //print array in range
print(arr[2:7:2])           //print array in range with 2 number jump

arr = np.array([(1,2,3,4,5,6,7),(8,9,10,11,12,13,14)])
print(arr[1][2])            //print element of 1 indexed row's 2 indexed element
print(arr[1,1:6])           //print elements in range of 1 indexed row's 1indexed element to 6 indexed

import numpy as np
arr = np.arange(1,51)           //print 1-50 numbers
print(arr)
print(arr[3:9])                 //print 3-9 elements slicing
print(arr[3:9:2])               //print 3-9 slicing with 2 jump

arr = np.arange(1,101)          //print 1-100   chalu 1 thi karo and 100 number sudhi print
print(arr)

arr = np.arange(51,61)
print(arr)                                              //print 51 to 60
print("Size of array:- ",format(arr.itemsize))                  //size of array

arr = np.arange(1,10)
print(arr.reshape(3,3))                 //matrix by range

arr = np.array([1,2,3,4,5,6,7,8,9])
print(arr.reshape(3,3))                 //matrix by array
print(arr.shape)
```

```
arr = np.arange(0,125,5)      //print 25 elements divisible by 5 (0-125 ma 5 jump karta elements)
print(arr)
print(arr.reshape(5,5))       //print 5*5 matrix array_name.reshape(rows,cols)


arr1 = np.arange(1,10)
print(arr1)                   //print array1 1-10
print(arr1.reshape(3,3))      //print 3*3 matrix
arr2 = np.arange(11,20)
print(arr2)                   //print array 11-20
print(arr2.reshape(3,3))      //print 3*3 matirx
a = np.vstack((arr1,arr2))          //vstack vertical stack function to print array
b = np.hstack((arr1,arr2))          //h stack horizontal stack function to print array
print(a)
print(b)

-------------------------------Panda-----------------------------------------

import pandas as pd
df = pd.read_csv("employee.csv")
df

First 5 print
df.head()

First specific number of data
df.head(7)

Last 5 print
df.tail()

Last specific number of data
df.tail(6)

Specific row
df['Salary']

Specific column        df.iloc[index]
df.iloc[4]

Gender Female print
df.loc[df['Gender']=='F']

salary max
df.loc[df['Salary'].idxmax()]
```

Salary min
```
df.loc[df['Salary'].idxmin()]
```

Woman with higher salary
```
a = df.loc[df['Gender']=='F']
a.loc[a['Salary'].idxmax()]
```

Check if data is null (True False)
```
df.isnull()
```

Check if data of not null(True or False)
```
df.notnull()
```

fill empty cell
```
df.fillna("Filled")
```

mean of salary
```
df['Salary'].mean()
```

drop nan
```
df.dropna()
```

Print nultiple columns
```
df[['Salary', 'Gender']]
```

Description
```
df.describe()
```

information
```
df.info()
```