# DAY-11 MORNING ASSESSMENT

# PANDAS QUESTIONS

1. We read a csv file by

df=pd.read\_csv(‘filename.csv’)

print(df.head(10))

1. Rows,columns=df.shape

print(rows,columns)

3.print(df[df[age]>25])

4.df[‘salary’].fillna(df[‘salary'].mean(),inplace=True)

5.df.rename(columns={‘emp\_id’ : ‘employee\_id’},inplace=True)

6.df.drop\_duplicates(inplace=True)

7.df[‘date’] = pd.to\_datetime(df[‘date’])

8.df.groupby(‘department’)[‘salary’].sum()

9.df.sort\_values(by=”date” ,ascending= False, inplace= True).

10.df[‘total\_marks’] = df[‘math’] + df[‘science’] +df[‘english’]

11.filtered\_df=df[df[‘score’]>=40) &(df[‘score’] <= 80)]

12.top\_3= df.nlargest(3, ‘sales’)

13. df[‘price’].agg([‘mean’ , ‘min’ ,’max’])

14.df.set\_index(‘date’ , inplace = True)

15.df[‘gender’] = df[‘gender’].map({‘M’ :1,’F’:0})

# Numpy Questions.

16. import numpy as np  
arr = np.arange(10)  
print(arr)

17. import numpy as np  
arr = np.random.randint(1,101,size=(3,3))  
print(arr)

18. import numpy as np  
arr = np.array([1,2,3,4,5])  
mean=np.mean(arr)  
std\_dev=np.std(arr)  
print(mean,std\_dev)

19. import numpy as np  
arr = np.array([1,2,3,400,5])  
arr[arr>50]=50  
print(arr)

o/p: [ 1 2 3 50 5]

20. import numpy as np  
arr=np.arange(12)  
reshaped=arr.reshape(3,4)  
print(reshaped)

o/p:

[[ 0 1 2 3]

[ 4 5 6 7]

[ 8 9 10 11]]

21. import numpy as np  
arr=np.array([1,2,3,4,5,6,7,8,9])  
even\_count=np.sum(arr%2==0)  
print("even numbers:",even\_count)

o/p: even numbers: 4

22. import numpy as np  
arr2d = np.array([[1,2,3],[4,5,6],[7,8,9]])  
flat = arr2d.flatten()  
print(flat)

o/p: [1 2 3 4 5 6 7 8 9]

23. import numpy as np  
arr = np.random.rand(10)  
print(arr)

o/p:

[0.94832197 0.83650405 0.99406179 0.73079313 0.37042009 0.58419045

0.47301531 0.28165903 0.04721062 0.92293145]

24. import numpy as np  
a= np.array([1,2,3,4,5])  
b= np.array([6,7,8,9,10])  
product = a\*b  
print(product)

o/p: [ 6 14 24 36 50]

25. import numpy as np  
arr = np.array([1,2,3,4,5])  
index = np.argmax(arr)  
print("index of max:",index)

o/p:

index of max: 4