Q1. How do you load a CSV file into a Pandas DataFrame?

Ans-import pandas as pd

df=pd.read\_csv('https://raw.githubusercontent.com/datasciencedojo/datasets/master/titanic.csv')

df

Q2. How do you check the data type of a column in a Pandas DataFrame?

Ans- df['PassengerId'].dtypes

Q3. How do you select rows from a Pandas DataFrame based on a condition?

Ans-using slicing e..g-df[0:50:5]

Q4. How do you rename columns in a Pandas DataFrame?

Ans- df.rename(columns={'SibSp':'Sib\_SP'},inplace=True)

Q5. How do you drop columns in a Pandas DataFrame?

Ans- df.drop('new\_column',axis=1)

Q6. How do you find the unique values in a column of a Pandas DataFrame?

Ans- df['Survived'].unique()

Q7. How do you find the number of missing values in each column of a Pandas DataFrame?

Ans- df.isnull()

Q8. How do you fill missing values in a Pandas DataFrame with a specific value?

Ans- newdf.fillna(222222)

Q9. How do you concatenate two Pandas DataFrames?

Ans- data1={'name':['Jai','Anuj','Jai','Prince'],'Age':[27,24,28,32],

'Address':['Nagpur','Allahabad','Noida','Noida'],'Qualifucation':

['BA','BCOM','MSC','BSC'],'Salary':[10,20,30,40]

}

data2={'name':['Gaurav','Anuj','Prince','Abhi','Gaurav'],'Age':[33,25,26,29,30],

'Address':['Allahabad','Aminpuri','Mau','Mau','Varanasi'],'Qualifucation':

['BTECH','MBA','PHD','BPHARMA','BTECH'],'Salary':[50,60,70,80,90]

}

df1=pd.DataFrame(data1,index=[0,1,2,3])

df2=pd.DataFrame(data2,index=[4,5,6,7,8])

df\_concat=[df1,df2]

res=pd.concat(df\_concat)

res

Q10. How do you merge two Pandas DataFrames on a specific column?

Ans- df1 = pd.DataFrame({'Name':['Raju', 'Rani', 'Geeta', 'Sita', 'Sohit'],

'Marks':[80, 90, 75, 88, 59]})

df2 = pd.DataFrame({'Name':['Raju', 'Divya', 'Geeta', 'Sita'],

'Grade':['A', 'A', 'B', 'A'],

'Rank':[3, 1, 4, 2 ],

'Gender':['Male', 'Female', 'Female', 'Female']})

df1.merge(df2[['Name','Grade','Rank']])

Q11. How do you group data in a Pandas DataFrame by a specific column and apply an aggregation function?

Ans- newdf.groupby('Name').groups

Q12. How do you pivot a Pandas DataFrame?

Ans- data1={'fff': ['one', 'one', 'one', 'two', 'two',

'two'],

'bbb': ['P', 'Q', 'R', 'P', 'Q', 'R'],

'baa': [2, 3, 4, 5, 6, 7],

'zzz': ['h', 'i', 'j', 'k', 'l', 'm']}

df1=pd.DataFrame(data1)

df1

df1.pivot(index='fff',columns='bbb',values='baa')

Q13. How do you change the data type of a column in a Pandas DataFrame?

Ans- df.new\_column=df.new\_column.astype(str)

Q14. How do you sort a Pandas DataFrame by a specific column?

Ans- sorted\_df=df.sort\_values(by='Name')

Q15. How do you create a copy of a Pandas DataFrame?

Ans- newdf=df.copy()

Q16. How do you filter rows of a Pandas DataFrame by multiple conditions?

Ans-by slicing e.g- df[0:50:5]

Q17. How do you calculate the mean of a column in a Pandas DataFrame?

Ans- df['PassengerId'].describe()

Q18. How do you calculate the standard deviation of a column in a Pandas DataFrame?

Ans- df['PassengerId'].describe()

Q19. How do you calculate the correlation between two columns in a Pandas DataFrame?

Ans- df['Pclass'].corr(df['Survived'])

Q20. How do you select specific columns in a DataFrame using their labels?

Ans- df['Name']

Q21. How do you select specific rows in a DataFrame using their indexes?

Ans- using index slicing. Eg.-df[0:50:5]

Q22. How do you sort a DataFrame by a specific column?

Ans- sorted\_df=df.sort\_values(by='Name')

Q23. How do you create a new column in a DataFrame based on the values of another column?

Ans-df[‘new\_column’]=df[‘PasengerId’]+df[‘Pclass’]

Q24. How do you remove duplicates from a DataFrame?

Ans- newonedf=newdf.drop\_duplicates()

newonedf

Q25. What is the difference between .loc and .iloc in Pandas?

Ans- .iloc tells the system generated index whereas .loc tells user generated index.