**Program 1**

import pandas as pd

import numpy as np

students={'Reg.No':['ABC123','ECH265','FET345','GMT734','UVW567'],'Name':['Ganesh Kumar','John Mathew','Reena K','Adil M','Anand'],'Branch':['CSE','IT','ME','CE','CSE'],'Semester':['S8','S7','S6','S5','S8'],'College':['ABC','ECH','FET','GMT','UVW'],'CGPA':[9.8,9.9,7,9.75,7.6]}

df=pd.DataFrame(students)

print("Original DataFrame\n\n")

print(df)

df.to\_csv('students.csv',index=False)

print("\nDisplaying Dataframe with student's regno and name \n\n",df[['Reg.No','Name']])

df1=df.sort\_values(by='Name')

print("\nDisplaying student details after sorting the names \n\n",df1)

df2=df.sort\_values(by='Name',ascending=False)

print("\nDisplaying student details after sorting the names \n\n",df2)

df3=df['CGPA'].mean()

df4=df['CGPA'].median()

df5=df['CGPA'].mode()

print("\nDisplaying the average CGPA of all students\n\n",df3)

print("\nDisplaying the median CGPA of all students\n\n",df4)

print("\nDisplaying the mode CGPA of all students\n\n",df5)

print("\nDisplaying student details having CGPA>9\n\n")

df6=df.loc[df['CGPA'] > 9]

print(df6)

print("\nDisplaying student details having CGPA>9 and branch =CSE\n\n")

df7=df.loc[(df['CGPA'] > 9) & (df['Branch'] == 'CSE')]

print(df7)

print("\nDisplaying student details with maximum CGPA\n\n")

df8=df[['Reg.No','Name','CGPA']][df.CGPA==df['CGPA'].max()]

print(df8)

print(df)

print("\nDisplaying average CGPA of each branch\n\n")

df9=df.groupby('Branch')[['CGPA']].mean()

print(df9)

**Program 2**

import pandas as pd

import numpy as np

df=pd.read\_csv("employees.csv")

print("\n\nDisplaying all the records \n\n")

print(df)

print("\n\nDisplaying First 7 records \n\n")

df1=df.head(7)

print(df1)

df2=df.sort\_values(by='Name')

print("\nDisplaying employee details after sorting the names \n\n",df2)

print("\nDisplaying employee details with maximum Salary\n\n")

df3=df[['Name','Team','Salary']][df.Salary==df['Salary'].max()]

print(df3)

print("\nDisplaying Male employees \n\n")

df4=df.loc[df['Gender'] == 'Male']

print(df4)

print("\nDisplaying employees according to Team\n\n")

df5=df.groupby(['Team','Name']).groups

print(df5)