Name: Rohan Kumar Saini

Roll No: RM2041A10

Registration No: 12011878

```
import numpy as np
import pandas as pd
from google.colab import files
```

Q1

```
files.upload()
```

```
Choose Files Book1.CSV
• Book1.CSV(application/vnd.ms-excel) - 668 bytes, last modified: 12/6/2021 - 100% done
Saving Book1.CSV to Book1 (1).CSV
{'Book1.CSV': b'\xef\xbb\xbfEMPNO,ENAME,JOB,HIREDATE,MGR,SAL,COMM,DEPTNO\r\n7369,SMI1
```

```
df=pd.read_csv('Book1.CSV')
print(df)
```

```
col=df.columns
print(col)
```

```
#Display the count of total number elements of the dataframe
print("Total number of elements in the given dataframe =", df.size)
```

```
#Display top 5 and bottom 5 rows of columns JOB to SAL
print(df[['JOB', 'HIREDATE', 'MGR', 'SAL']].head(5))
print()
print(df[['JOB', 'HIREDATE', 'MGR', 'SAL']].tail(5))
```

```
#Write the python code statement to print the value “23-May-87” from dataframe.
print(df[['HIREDATE']].iloc[10])
```

```
#Write the python code statement to print the values 1st,3rd ,5th , 7th and 9th row for th
print(df[['HIREDATE']].iloc[0:10:2])
```

```
#Display the average value of the column SAL.
print(df[['SAL']].mean())
```

Q2.

```
#Creating a series from array
array=np.array(['a', 'b', 'c', 'd', 'e'])
series=pd.Series(array)
print(series)


#Creating a series from array with index
array=np.array(['a', 'b', 'c', 'd', 'e'])
series= pd.Series(array, index =[10, 11, 12, 13, 14])
print(series)


#Creating a series from Lists
list=['A', 'B', 'C', 'D', 'E']
series=pd.Series(list)
print(series)


#Creating a seies from Dictionary
dictionary={'Rohan':10, 'Kumar':20, 'Saini':30}
series= pd.Series(dictionary)
print(series)


#Creating a series from Scalar value
series=pd.Series(10, index =[0, 1, 2, 3, 4, 5])
print(series)
```

Q3.

```
files.upload()
```

Choose Files TITANIC.csv

- **TITANIC.csv**(application/vnd.ms-excel) - 81486 bytes, last modified: 12/6/2021 - 100% done

```
Saving TITANIC.csv to TITANIC.csv
{'TITANIC.csv': b'PassengerId,Survived,Name,Gender,Age,Ticket,Fare,Cabin,Embarked\r\r
```

```
DATA=pd.read_csv('TITANIC.csv')
print(DATA)


#Retrieve all the rows from dataframe when the value of age of the traveller is lies betwe
DATA[(DATA.Age>40) & (DATA.Age>50)]


#Retrieve the names and gender of all the persons who was survived after the ship fell int
DATA[DATA["Survived"]==1]


#Select and display last 10 rows from the dataframe when Fare is more than 100 and less th
```

```
DATA[(DATA.Fare>100) & (DATA.Fare<200)].tail(10)


#Create the newdataframe(ndf) from original dataframe(df) containing all rows and the foll
NEWDATA=DATA[["Name", "Ticket", "Fare"]]
print(NEWDATA)
print()
print(NEWDATA.sort_values(by=["Name"], ascending=False))
```

✓ 0s completed at 10:28 PM