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Name: Rohan Kumar Saini

Roll No: RM2041A10

Registration No: 12011878

### SetB (Even Roll No)

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

Q1.

Answer

```
files.upload()
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])
```

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# Write the python code statement to print the values 1st, 3rd, 5th, 7th and 9th row for the column "Hire Date"

```
print(df[['HIREDATE']].iloc[0:10:2])
```

# Display the average value of the column SAL.

```
print(df[['SAL']].mean())
```

Q2.

Answer

# 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 series from Dictionary

```
dictionary = {'Rohan': 10, 'Kumar': 20, 'Saini': 30}
```

```
series = pd.Series(dictionary)
```

```
print(series)
```

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

Q3.

Answer

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

# Retrieve all the rows from dataframe when the value of age of the traveller is lies between 40 and 50

```
DATA[DATA.Age > 40 & DATA.Age < 50]
```

# Retrieve the names and gender of all the persons who was survived after the ship fell into the sea

```
DATA[DATA["Survived"] == 1]
```

# Select and display last 10 rows from the dataframe when Fare is more than 100 and less than 200.

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

# Create the new dataframe (ndf) from original dataframe (df) containing all rows and the following columns [name, ticket, fare]. Sort and display all values of column Name in descending order.

```
NEW DATA = DATA[["Name", "Ticket", "Fare"]]
```

```
print(NEW DATA)
```

```
print()
```

```
print(NEW DATA.sort_values(by=["Name"], ascending=False))
```