EDS Make-up Session Activity 1

Name:- Vishal Shende

Division:- CS7

Roll No.:- CS7-65

PRN:- 202401110034

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 1. Total number of passengers
print("1. Total number of passengers:")
print(len(df))
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
1. Total number of passengers:
891
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 2. Percentage of passengers who survived
print("2. Percentage of passengers who survived:")
print((df['Survived'].mean() * 100).round(2))
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
2. Percentage of passengers who survived:
38.38
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 3. Number of passengers in each class
print("3. Number of passengers in each class:")
print(df['Pclass'].value_counts())
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
3. Number of passengers in each class:
Pclass
3    491
1    216
2    184
Name: count, dtype: int64
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 4. Average fare paid by passengers
print("4. Average fare paid by passengers:")
print(df['Fare'].mean())
print("\n")

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
4. Average fare paid by passengers:
32.204207968574636


5. Average age by sex:
Sex
female    27.915709
male      30.726645
Name: Age, dtype: float64
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 5. Average age of male and female passengers
print("5. Average age by sex:")
print(df.groupby('Sex')['Age'].mean())
print("\n")

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
5. Average age by sex:
Sex
female    27.915709
male      30.726645
Name: Age, dtype: float64
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 6. Number of passengers who traveled alone
print("6. Number of passengers who traveled alone:")
print(df[(df['SibSp'] == 0) & (df['Parch'] == 0)].shape[0])
print("\n")

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
6. Number of passengers who traveled alone:
537
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 7. Survival rate by class
print("7. Survival rate by class:")
print(df.groupby('Pclass')['Survived'].mean())
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
7. Survival rate by class:
Pclass
1    0.629630
2    0.472826
3    0.242363
Name: Survived, dtype: float64
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 8. Most common age of passengers
print("8. Most common age of passengers:")
print(df['Age'].mode()[0])
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
8. Most common age of passengers:
24.0
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 9. Fare range (min to max)
print("9. Fare range (min, max):")
print((df['Fare'].min(), df['Fare'].max()))
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
9. Fare range (min, max):
(np.float64(0.0), np.float64(512.3292))
```

EDS > makeup_activity.py > ...

```python
import pandas as pd

# Load dataset
df = pd.read_csv(r"D:\om\MIT-AoE\EDS\titanic.csv")

# 10. Passengers with missing age
print("10. Passengers with missing age:")
print(df['Age'].isna().sum())
print("\n")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS D:\om\MIT-AoE\EDS> & C:/Users/premo/AppData/Local/Microsoft/WindowsApps/python3.13.exe d:/om/MIT-AoE/EDS/makeup_activity.py
10. Passengers with missing age:
177
```