In [20]:

```
# Importing required packages
import numpy as np
import pandas as pd
```

In [21]:

```
# ************************************** Subtask 1 ********************************
***************
# Load the Titanic dataset into a DataFrame
titanic_df = pd.read_csv('titanic.csv')
titanic_df
```

Out[21]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C85	C
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	NaN	S
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C123	S
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	NaN	S
...	...	...	...	...	...	...	...	...	...	...	...	...
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.0000	NaN	S
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.0000	B42	S
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.4500	NaN	S
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.0000	C148	C
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.7500	NaN	Q

891 rows × 12 columns

In [22]:

```
# ************************************** Subtask 2 ********************************
***************
# Find the names of passengers younger than 35 years
young_passengers = titanic_df[titanic_df['Age'] < 35]['Name']
young_passengers
```

Out[22]:

```
0                                Braund, Mr. Owen Harris
2                                 Heikkinen, Miss. Laina
7                          Palsson, Master. Gosta Leonard
8      Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)
9                    Nasser, Mrs. Nicholas (Adele Achem)
                              ...
884                           Sutehall, Mr. Henry Jr
886                            Montvila, Rev. Juozas
887                     Graham, Miss. Margaret Edith
889                             Behr, Mr. Karl Howell
```

```
890                                  Dooley, Mr. Patrick
Name: Name, Length: 479, dtype: object
```

In [23]:

```
# ****************************************** Subtask 3 ********************************
***************
# Print the rows from index 10 to 25 and columns 3 to 5
print(titanic_df.iloc[10:26, 3:6])
```

```
                                                Name     Sex   Age
10                      Sandstrom, Miss. Marguerite Rut  female   4.0
11                             Bonnell, Miss. Elizabeth  female  58.0
12                       Saundercock, Mr. William Henry    male  20.0
13                          Andersson, Mr. Anders Johan    male  39.0
14                  Vestrom, Miss. Hulda Amanda Adolfina  female  14.0
15                      Hewlett, Mrs. (Mary D Kingcome)   female  55.0
16                                  Rice, Master. Eugene    male   2.0
17                          Williams, Mr. Charles Eugene    male   NaN
18  Vander Planke, Mrs. Julius (Emelia Maria Vande...  female  31.0
19                               Masselmani, Mrs. Fatima  female   NaN
20                                  Fynney, Mr. Joseph J    male  35.0
21                                Beesley, Mr. Lawrence    male  34.0
22                          McGowan, Miss. Anna "Annie"  female  15.0
23                         Sloper, Mr. William Thompson    male  28.0
24                        Palsson, Miss. Torborg Danira  female   8.0
25  Asplund, Mrs. Carl Oscar (Selma Augusta Emilia...  female  38.0
```

In [24]:

```
# ****************************************** Subtask 4 ********************************
***************
# Find out the statistics aggregate of Age & Fare using the DataFrame.agg() method
agg_df = titanic_df[['Age', 'Fare']].agg(['min', 'max', 'mean', 'median', 'std'])
print(agg_df)
```

```
              Age        Fare
min      0.420000    0.000000
max     80.000000  512.329200
mean    29.699118   32.204208
median  28.000000   14.454200
std     14.526497   49.693429
```

In [25]:

```
# ****************************************** Subtask 5 ********************************
***************
# Find out the mean ticket fare price for each of the sex and cabin class combinations
fare_by_sex_and_class = titanic_df.groupby(['Sex', 'Pclass'])['Fare'].mean()
print(fare_by_sex_and_class)
```

```
Sex     Pclass
female  1         106.125798
        2          21.970121
        3          16.118810
male    1          67.226127
        2          19.741782
        3          12.661633
Name: Fare, dtype: float64
```

In [ ]:

```

```