

# Analysis of victims and survivors of passengers in the Titanic

0

data analysis final project

#### Question we need to anwer:

- 1. How many survived passengers? and what gender they were?
- 2. What the average age for each gender?
- 3. What information can u give about Age?
- 4. Occurance of age in each pclass.

```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
```

#### FIRST STEPS

titanic = pd.read\_csv('tested.csv') titanic.head() PassengerId Survived Pclass Sex Age SibSp Parch Fare Cabin Embarked **Ticket** 892 330911 7.8292 NaN Q Kelly, Mr. James male 34.5 Wilkes, Mrs. James (Ellen Needs) 7.0000 NaN S 893 female 47.0 363272 Myles, Mr. Thomas Francis 0 240276 9.6875 894 male 62.0 NaN Q 895 0 Wirz, Mr. Albert male 27.0 0 315154 8.6625 NaN S 3 Hirvonen, Mrs. Alexander (Helga E Lindqvist) female 22.0 3101298 S 896 12.2875 NaN

#describing how many columns and rows have table titanic.shape

# columns of the table
titanic.columns

```
# sums of nulls in each column
   titanic.isnull().sum()
PassengerId
                0
Survived
                0
Pclass
Name
Sex
Age
               86
SibSp
Parch
Ticket
                0
Fare
Cabin
              327
Embarked
                0
dtype: int64
```

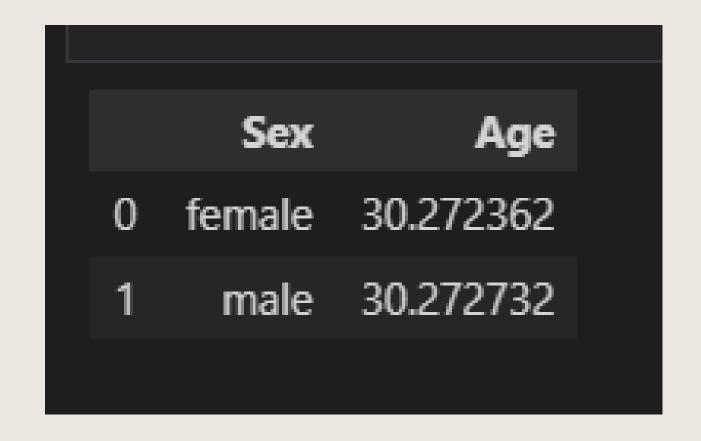
Sum of survived people

by this anayse we knowed that

There were 152 survived passengers from the titanic

Average for each gender category





In each gender type there are approximately same average. but average of male is greater for 0.013 than female

coefficent of survived by pclasses

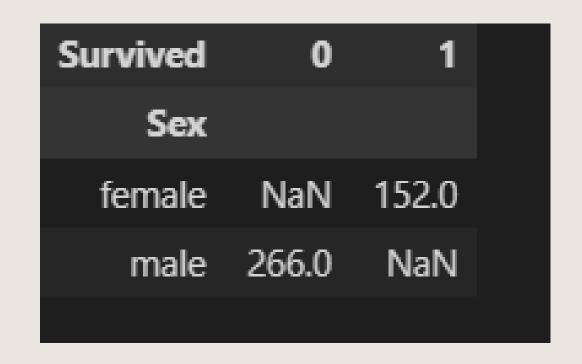
	Pclass	Survived	
0	1	0.467290	
2	3	0.330275	
1	2	0.322581	

by this analyse we knowed that

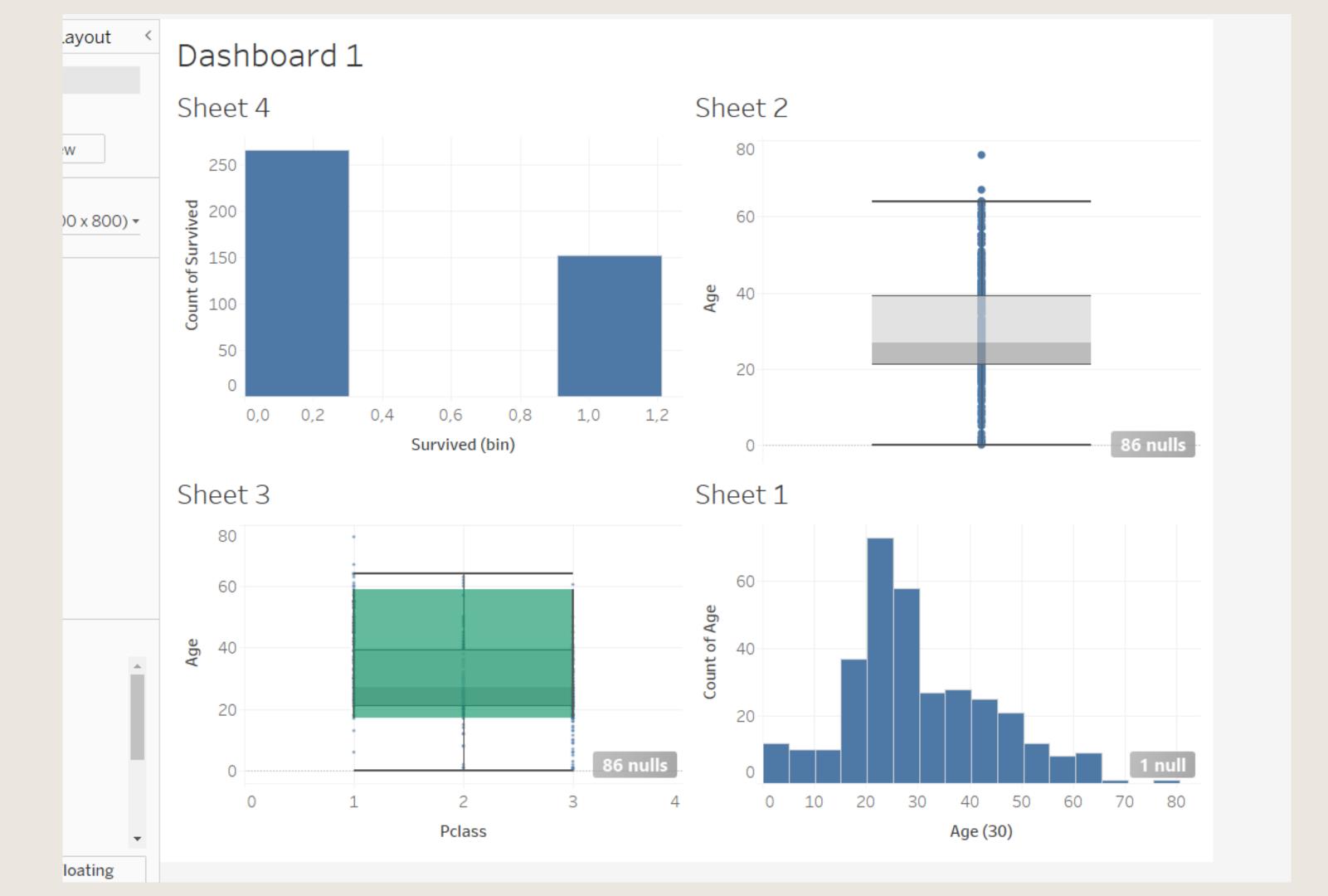
Most of survived passengers are from 1st class

Number of survived males and females

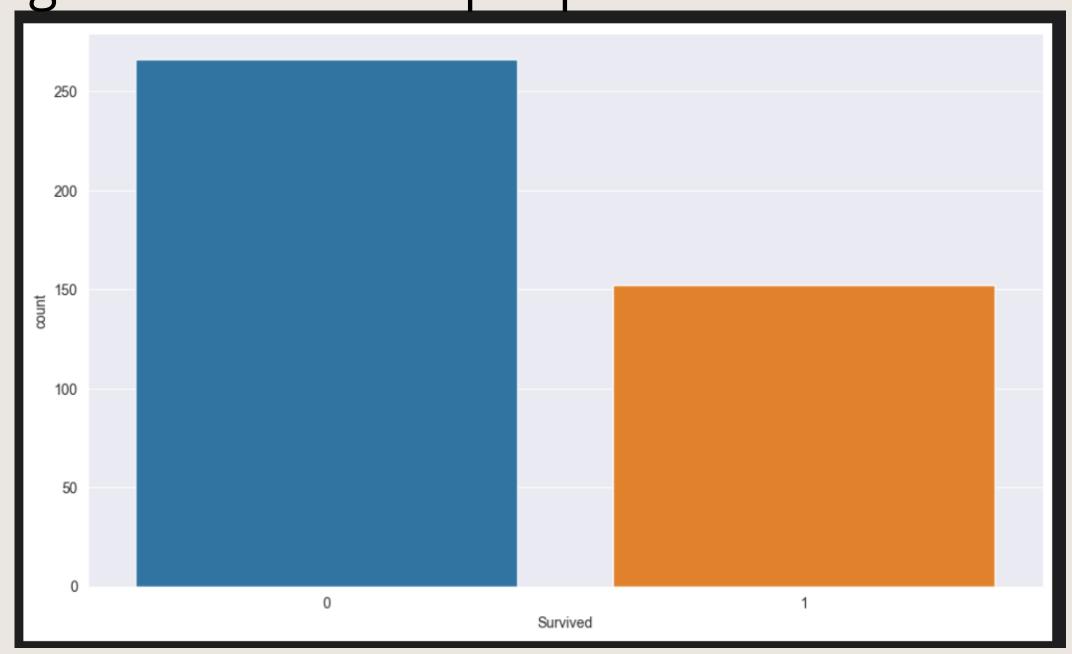




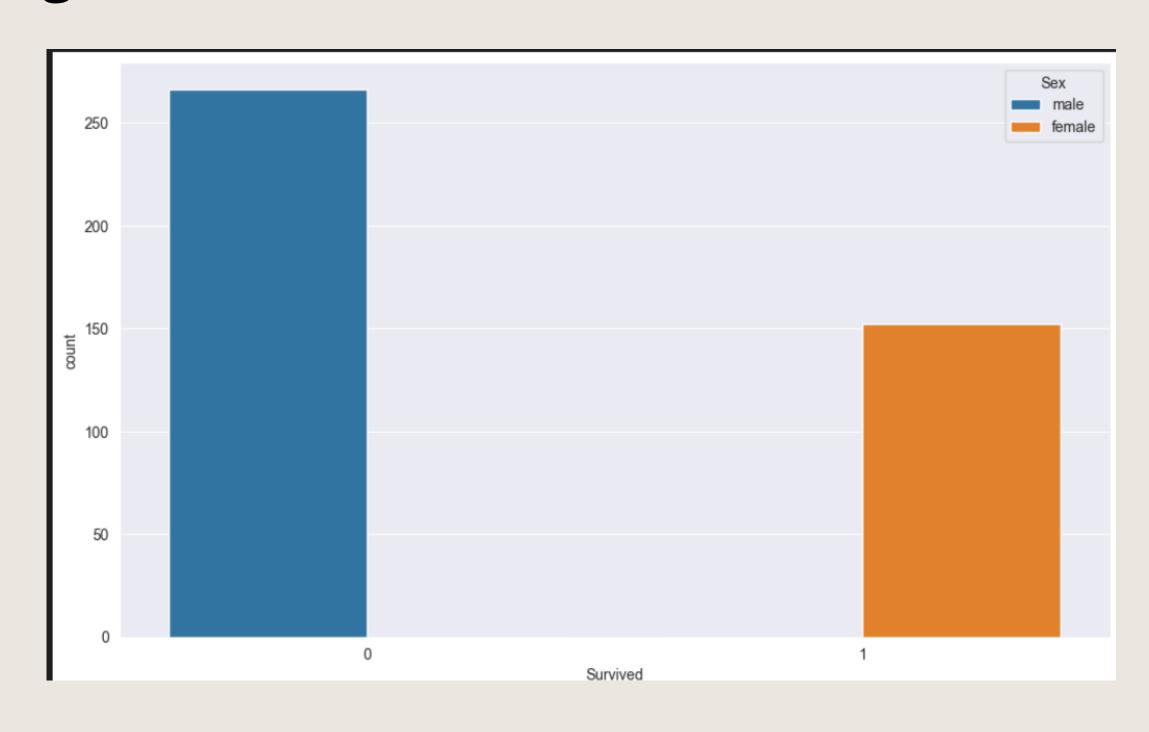
All survaved people were females and all males were died



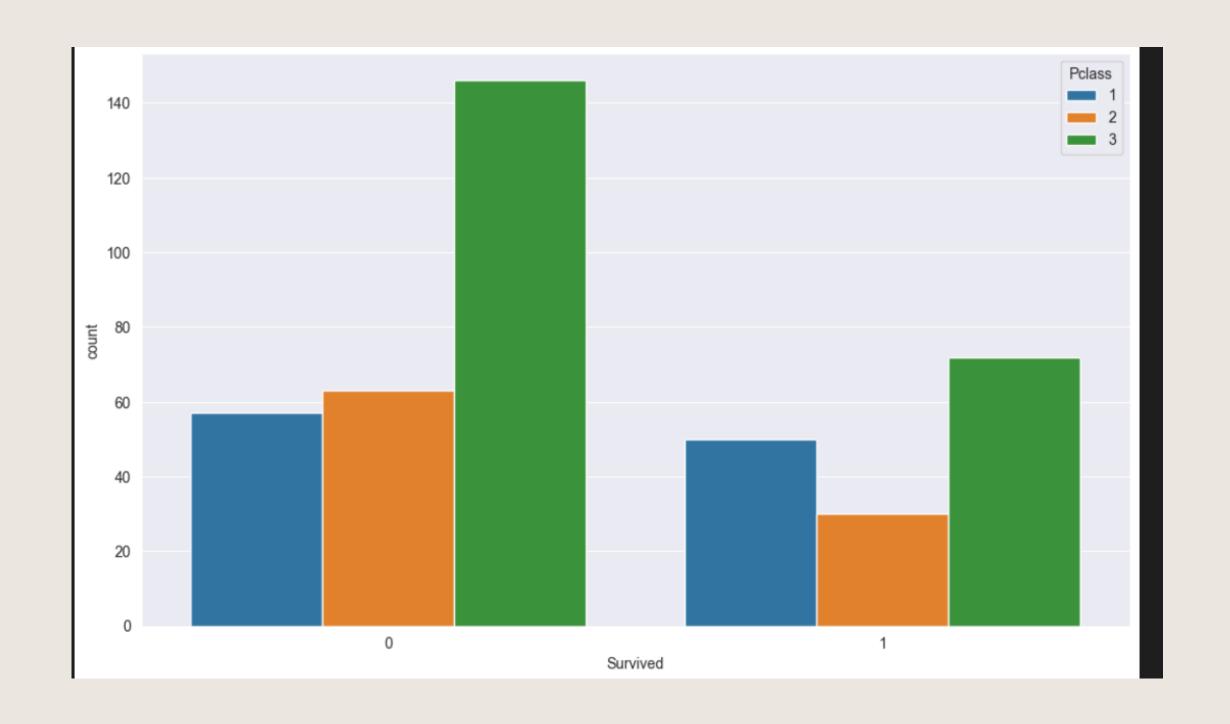
showing hist of survived people



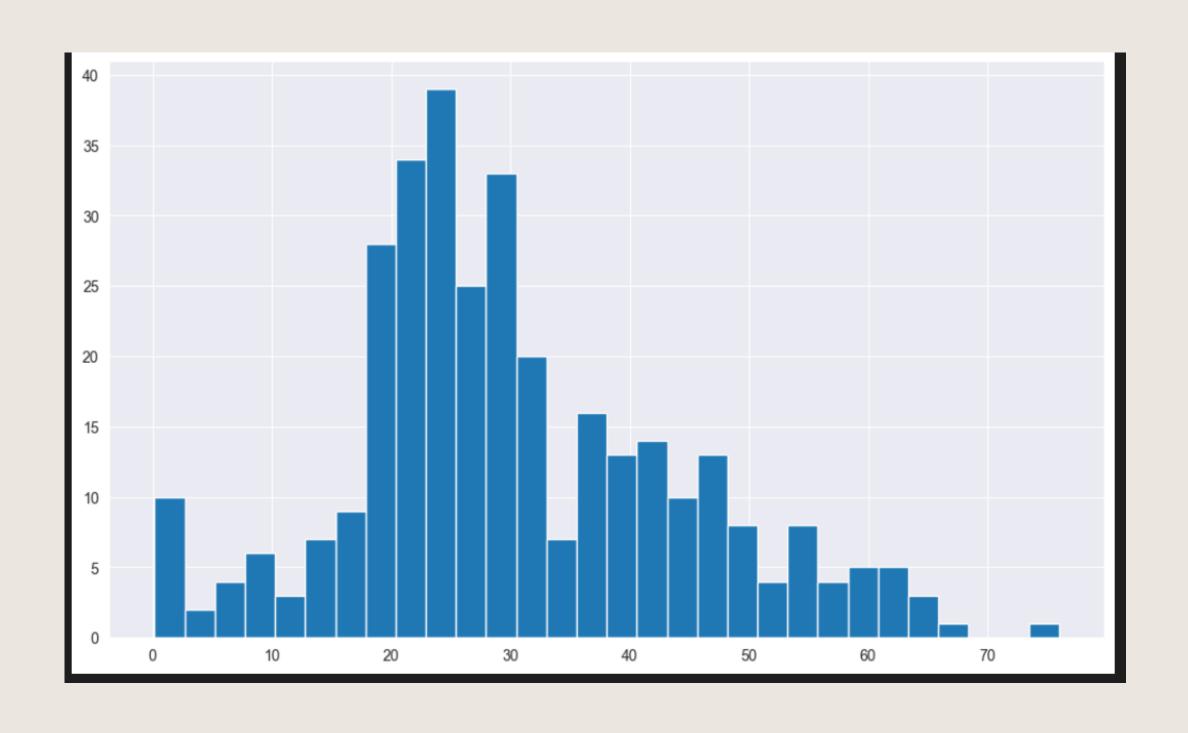
showing survived statuses for each gender



showing survived statuses for each pclass

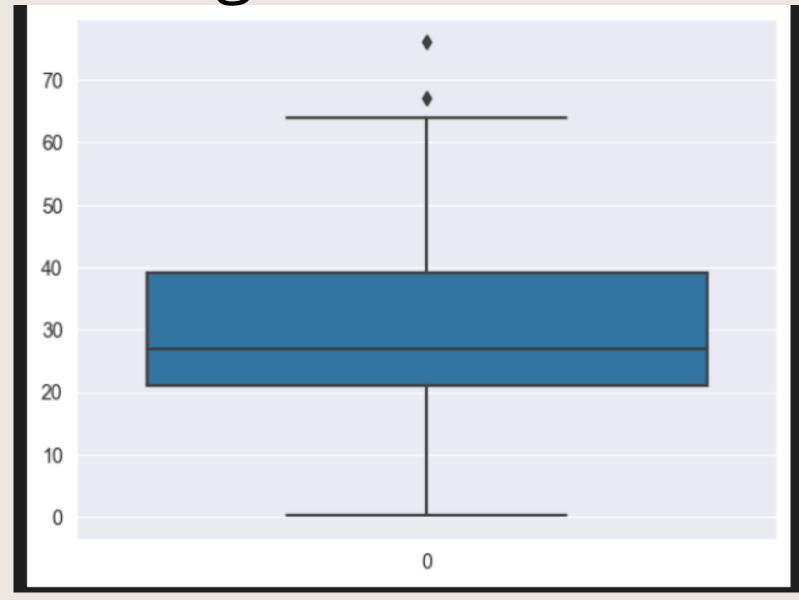


### histogram of age



information about age

count	332.000000
mean	30.272590
std	14.181209
min	0.170000
25%	21.000000
50%	27.000000
75%	39.000000
max	76.000000



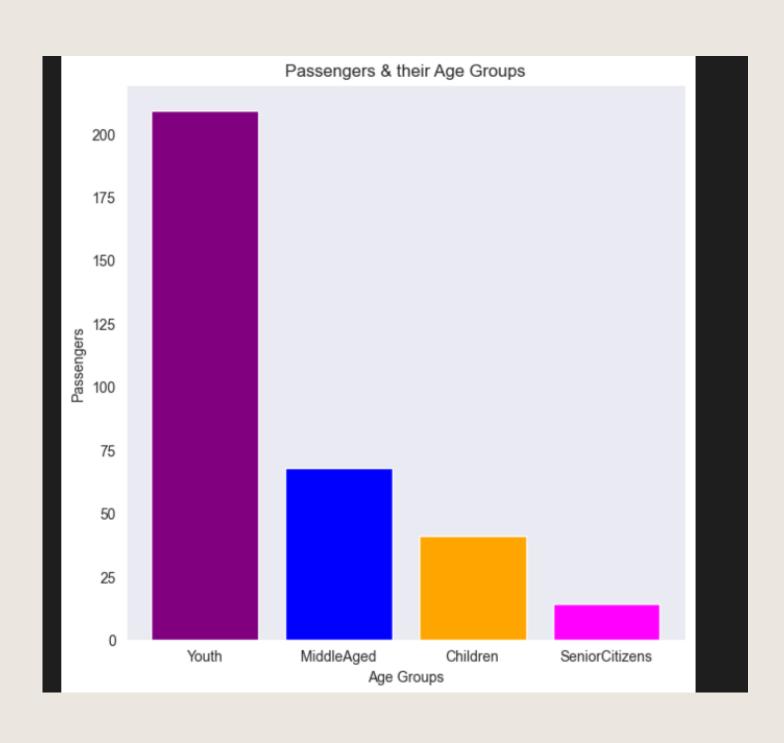
Number of passengers who was <18



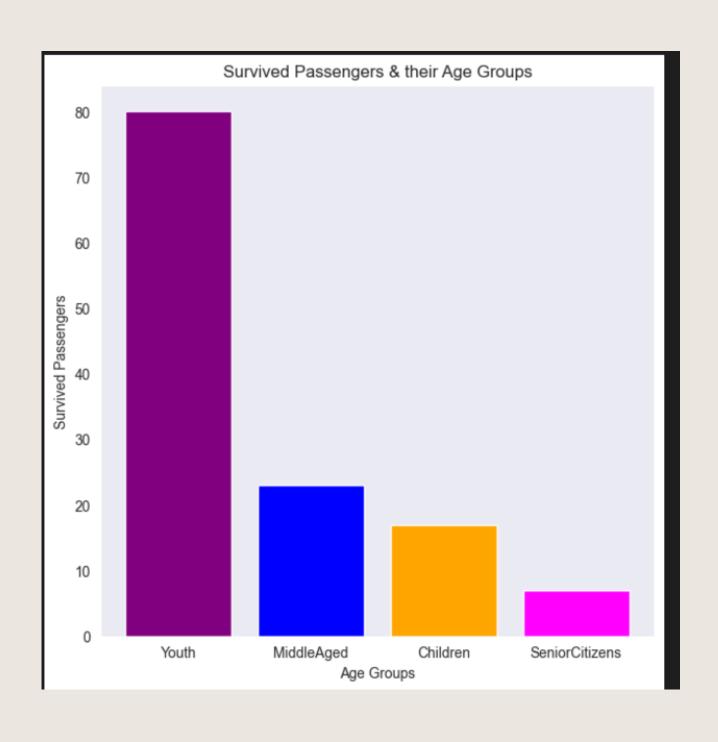
# Analyse 10 dividing to categories by age

```
labels = ["Children","Youth","MiddleAged","SeniorCitizens"]
bins = [-np.inf,17, 39, 59, np.inf]
```

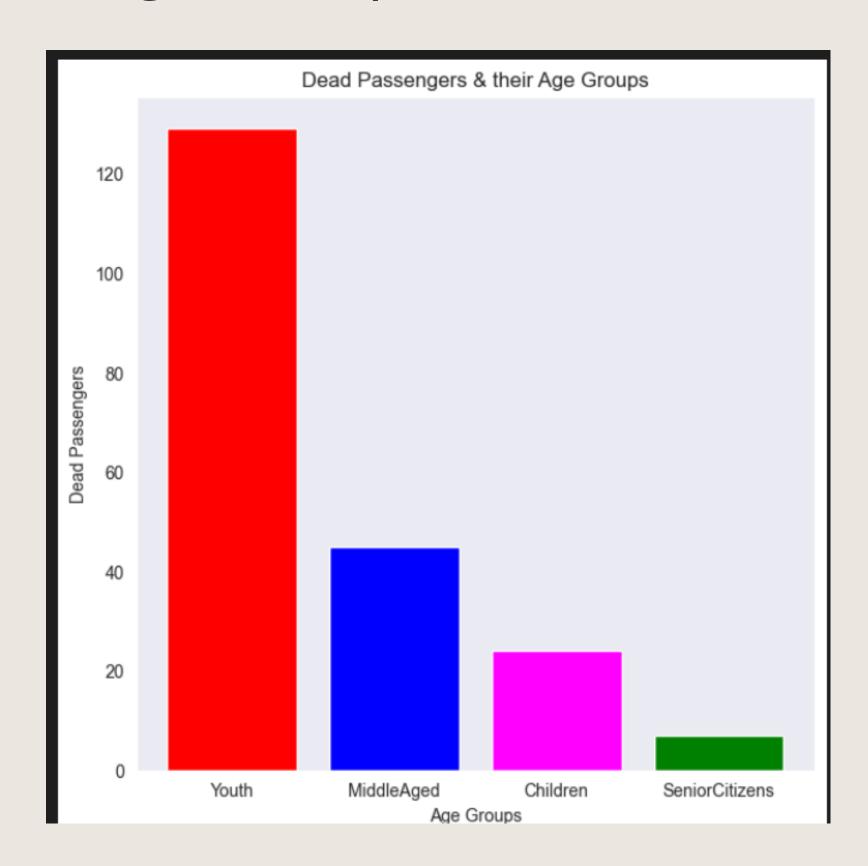
### Passengers & their Age Groups



Survived passengers and their age group



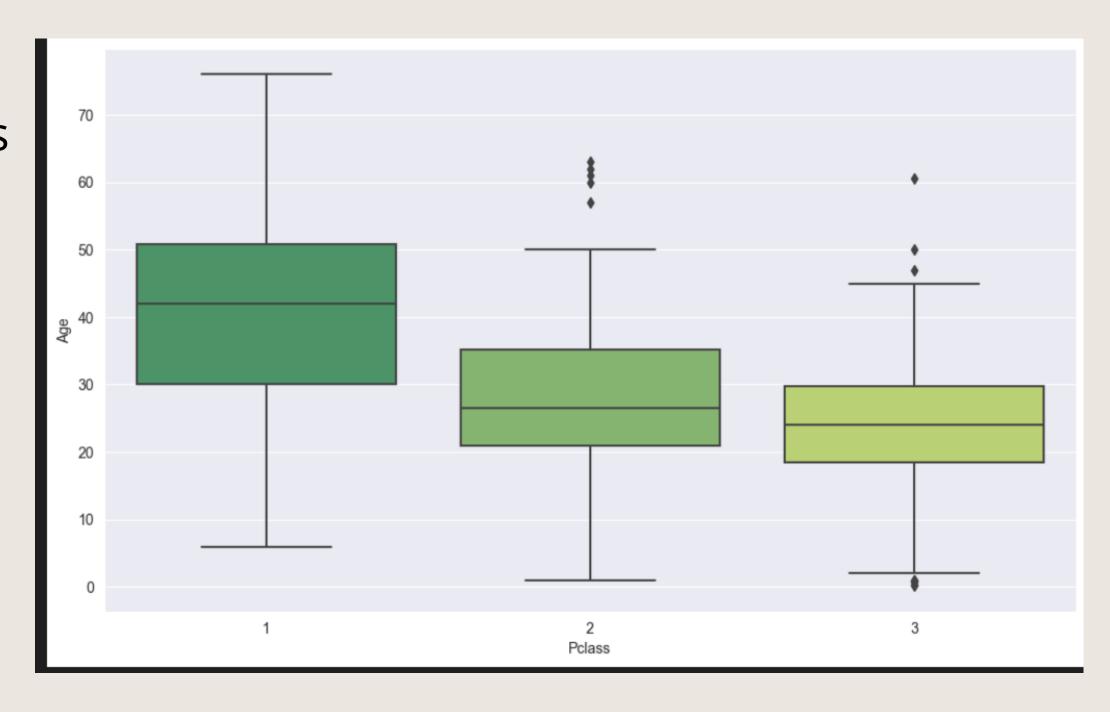
Dead Passengers & their Age Groups



### Showing ages in each pclass

We can see the wealthier passengers in the higher classes tend to be older, which makes sense.

By the analyse above, in the 1st class most of people are older than other classes.



filling nan values in age

by analyse before, we can see that the wealthier people are older than other classes. filling nan values by this analyse if pclass 1 =37, and 29, 24

how many males and females had cabins

47 males had cabins and 44 females had cabin

### Showing Embarked column as pie

```
titanic['Embarked'].unique()

0.3s

array(['Q', 'S', 'C'], dtype=object)
```

