

```
In [1]: import pandas as pd
import numpy as np
import matplotlib as plt
import seaborn as sns
%matplotlib inline
```

```
In [30]: # Reading the data
titanic_data = pd.read_csv('/Users/apple/Desktop/titanic-data.csv')
```

```
In [31]: # Displaying header rows
titanic_data.head()
```

Out[31]:

	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

```
In [32]: # Displaying Description
titanic_data.describe()
```

Out[32]:

	PassengerId	Survived	Pclass	Age	SibSp	Parch	Fare
<b>count</b>	891.000000	891.000000	891.000000	714.000000	891.000000	891.000000	891.000000
<b>mean</b>	446.000000	0.383838	2.308642	29.699118	0.523008	0.381594	32.204208
<b>std</b>	257.353842	0.486592	0.836071	14.526497	1.102743	0.806057	49.693429
<b>min</b>	1.000000	0.000000	1.000000	0.420000	0.000000	0.000000	0.000000
<b>25%</b>	223.500000	0.000000	2.000000	20.125000	0.000000	0.000000	7.910400
<b>50%</b>	446.000000	0.000000	3.000000	28.000000	0.000000	0.000000	14.454200
<b>75%</b>	668.500000	1.000000	3.000000	38.000000	1.000000	0.000000	31.000000
<b>max</b>	891.000000	1.000000	3.000000	80.000000	8.000000	6.000000	512.329200

```
In [33]: # Dropping unwanted columns
titanic_data.drop(['Cabin', 'SibSp', 'Parch', 'Ticket', 'Embarked'], axis=1).head()
```

Out[33]:

	PassengerId	Survived	Pclass	Name	Sex	Age	Fare
<b>0</b>	1	0	3	Braund, Mr. Owen Harris	male	22.0	7.2500
<b>1</b>	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	71.2833
<b>2</b>	3	1	3	Heikkinen, Miss. Laina	female	26.0	7.9250
<b>3</b>	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	53.1000
<b>4</b>	5	0	3	Allen, Mr. William Henry	male	35.0	8.0500

```
In [34]: # Replace missing age values with the mean Age
titanic_data['Age'].fillna(titanic_data['Age'].mean()).head()
```

```
Out[34]: 0    22.0
         1    38.0
         2    26.0
         3    35.0
         4    35.0
         Name: Age, dtype: float64
```

```
In [41]: # Finding number of entries, listing the dataset, finding datatypes
titanic_data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 891 entries, 0 to 890
Data columns (total 12 columns):
PassengerId    891 non-null int64
Survived       891 non-null int64
Pclass         891 non-null int64
Name           891 non-null object
Sex            891 non-null object
Age            714 non-null float64
SibSp          891 non-null int64
Parch          891 non-null int64
Ticket         891 non-null object
Fare           891 non-null float64
Cabin          204 non-null object
Embarked       889 non-null object
dtypes: float64(2), int64(5), object(5)
memory usage: 83.6+ KB
```

```
In [46]: # Min and Max Age
print("Min Age: ", titanic_data['Age'].min(), "(Cute infants were there too!)")
print("Max Age: ", titanic_data['Age'].max())
```

```
Min Age:    0.42 (Cute infants were there too!)
Max Age:    80.0
```

```
In [47]: # Mean Value of Age attribute
print("Mean Age: ", titanic_data['Age'].mean())
```

```
Mean Age:    29.69911764705882
```

```
In [53]: # Plotting a Histogram
age_plt = titanic_data['Age'].hist(bins=100)
age_plt.set_xlabel("Age")
age_plt.set_ylabel("Number of people")
age_plt.set_title("Histogram of Age")
```

```
Out[53]: Text(0.5,1,'Histogram of Age')
```

