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In [1]: import matplotlib.pyplot as plt  
import pandas as pd
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In [2]: df=pd.read_csv("Titanic_dataset.csv")
```

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In [3]: df.head()
```

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Out[3]:
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	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C85
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/ O2. 3101282	7.9250	NaN
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C123
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	NaN

```
In [4]: df.tail()
```

```
Out[4]:
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	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	E
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.00	NaN	
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.00	B42	
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.45	NaN	
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.00	C148	
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.75	NaN	

```
In [5]: df.shape
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Out[5]: (891, 12)
```

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In [6]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 891 entries, 0 to 890
Data columns (total 12 columns):
 #   Column          Non-Null Count  Dtype  
---  -
 0   PassengerId     891 non-null   int64  
 1   Survived        891 non-null   int64  
 2   Pclass          891 non-null   int64  
 3   Name            891 non-null   object  
 4   Sex             891 non-null   object  
 5   Age            714 non-null   float64 
 6   SibSp          891 non-null   int64  
 7   Parch          891 non-null   int64  
 8   Ticket         891 non-null   object  
 9   Fare           891 non-null   float64 
10   Cabin          204 non-null   object  
11   Embarked       889 non-null   object  
dtypes: float64(2), int64(5), object(5)
memory usage: 83.7+ KB
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In [7]: df.isnull().sum()
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Out[7]: PassengerId      0
        Survived        0
        Pclass          0
        Name            0
        Sex              0
        Age             177
        SibSp            0
        Parch            0
        Ticket          0
        Fare             0
        Cabin           687
        Embarked        2
        dtype: int64
```

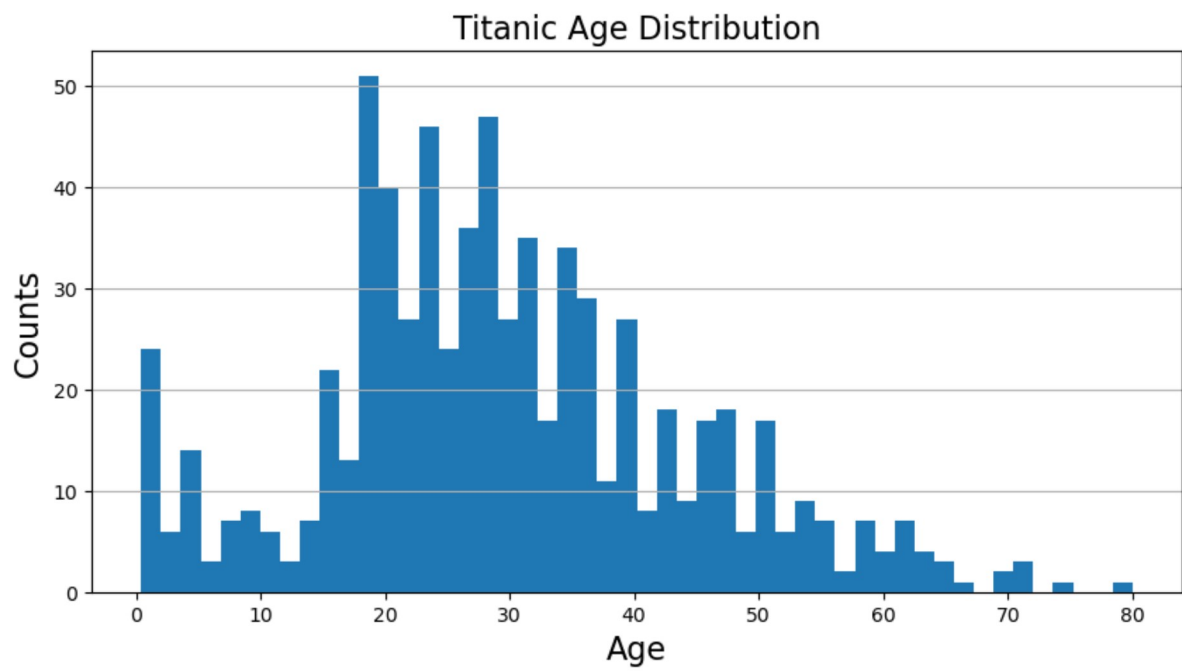
```
In [8]: df.describe()
```

```
Out[8]:
```

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

```
In [10]: Age=df["Age"]
```

```
In [21]: plt.figure(figsize=(10,5))
plt.hist(Age,bins=50)
plt.title("Titanic Age Distribution",fontsize=16)
plt.xlabel("Age",fontsize=16)
plt.ylabel("Counts",fontsize=16)
plt.grid(axis="y")
plt.show()
```



In []: