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```
In [7]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
from matplotlib import rcParams
from scipy import stats

In [2]: data=pd.read_csv("C:\\Users\\dataset\\indian_liver_patient.csv")

In [3]: data.head()

Out[3]:
```

	Age	Gender	Total_Bilirubin	Direct_Bilirubin	Alkaline_Phosphotase	Alamine_Aminotransferase	Aspartate_Aminotransferase	Total_Protiens	Albumin	Albumi
0	65	Female	0.7	0.1	187	16	18	6.8	3.3	
1	62	Male	10.9	5.5	699	64	100	7.5	3.2	
2	62	Male	7.3	4.1	490	60	68	7.0	3.3	
3	58	Male	1.0	0.4	182	14	20	6.8	3.4	
4	72	Male	3.9	2.0	195	27	59	7.3	2.4	

```
In [5]: data.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 583 entries, 0 to 582
Data columns (total 11 columns):
#   Column                                Non-Null Count  Dtype
0   Age                                    583 non-null    int64
1   Gender                                583 non-null    object
2   Total_Bilirubin                       583 non-null    float64
3   Direct_Bilirubin                     583 non-null    float64
4   Alkaline_Phosphotase                 583 non-null    int64
5   Alamine_Aminotransferase             583 non-null    int64
6   Aspartate_Aminotransferase           583 non-null    int64
7   Total_Protiens                       583 non-null    float64
8   Albumin                              583 non-null    float64
9   Albumin_and_Globulin_Ratio           579 non-null    float64
10  Dataset                              583 non-null    int64
dtypes: float64(5), int64(5), object(1)
memory usage: 50.2+ KB
```

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In [31]: liverdata=pd.DataFrame
liverdata.shape

Out[31]: <property at 0x1196c7295d0>

In [10]: from sklearn.preprocessing import LabelEncoder
lc = LabelEncoder()
data['Gender']=lc.fit_transform(data['Gender'])
```

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In [33]: data.describe()

Out[33]:

	Age	Gender	Total_Bilirubin	Direct_Bilirubin	Alkaline_Phosphatase	Alamine_Aminotransferase	Aspartate_Aminotransferase	Total_Proteins
count	583.000000	583.000000	583.000000	583.000000	583.000000	583.000000	583.000000	583.000000
mean	44.746141	0.756432	3.298799	1.486106	290.576329	80.713551	109.910806	6.483190
std	16.189833	0.429603	6.209522	2.808498	242.937989	182.620356	288.918529	1.085451
min	4.000000	0.000000	0.400000	0.100000	63.000000	10.000000	10.000000	2.700000
25%	33.000000	1.000000	0.800000	0.200000	175.500000	23.000000	25.000000	5.800000
50%	45.000000	1.000000	1.000000	0.300000	208.000000	35.000000	42.000000	6.600000
75%	58.000000	1.000000	2.600000	1.300000	298.000000	60.500000	87.000000	7.200000
max	90.000000	1.000000	75.000000	19.700000	2110.000000	2000.000000	4929.000000	9.600000

In [13]: sns.distplot(data['Age'])
plt.title('Age distribution Graph')
plt.show()

C:\Users\Elakkiya\AppData\Local\Temp\ipykernel_11592\948853768.py:1: UserWarning:
'distplot' is a deprecated function and will be removed in seaborn v0.14.0.
Please adapt your code to use either 'displot' (a figure-level function with similar flexibility) or 'histplot' (an axes-level function for histograms).
For a guide to updating your code to use the new functions, please see

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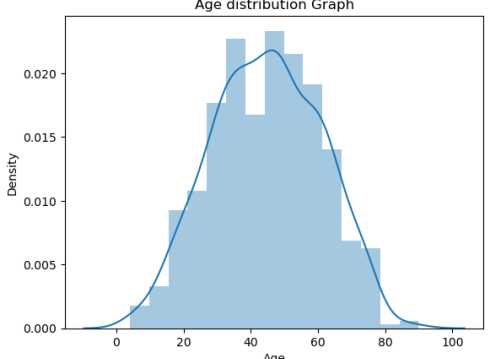
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NameError: name 'plot' is not defined

Age distribution Graph



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