

Task 1: Create a bar chart or histogram to visualize the distribution of a categorical or continuous variable, such as the distribution of ages or genders in a population.

Import Libraries & Load Dataset

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv("healthcare_dataset.csv")
data.head(5)
```

	Name	Age	Gender	Blood Type	Medical Condition	Date of Admission	Doctor	Hospital	Insurance Provider	Billing Amount	Room Number	Admission Type	Discharge Date	Medication	Test Results
0	Bobby Jackson	30	Male	B-	Cancer	1/31/2024	Matthew Smith	Sons and Miller	Blue Cross	18856.28131	328	Urgent	2/2/2024	Paracetamol	Normal
1	Leslie TeRry	62	Male	A+	Obesity	8/20/2019	Samantha Davies	Kim Inc	Medicare	33643.32729	265	Emergency	8/26/2019	Ibuprofen	Inconclusive
2	Danny Smith	76	Female	A-	Obesity	9/22/2022	Tiffany Mitchell	Cook PLC	Aetna	27955.09608	205	Emergency	10/7/2022	Aspirin	Normal
3	andrew waTIS	28	Female	O+	Diabetes	11/18/2020	Kevin Wells	Hernandez Rogers and Vang,	Medicare	37909.78241	450	Elective	12/18/2020	Ibuprofen	Abnormal
4	adriENNE Bell	43	Female	AB+	Cancer	9/19/2022	Kathleen Hanna	White-White	Aetna	14238.31781	458	Urgent	10/9/2022	Penicillin	Abnormal

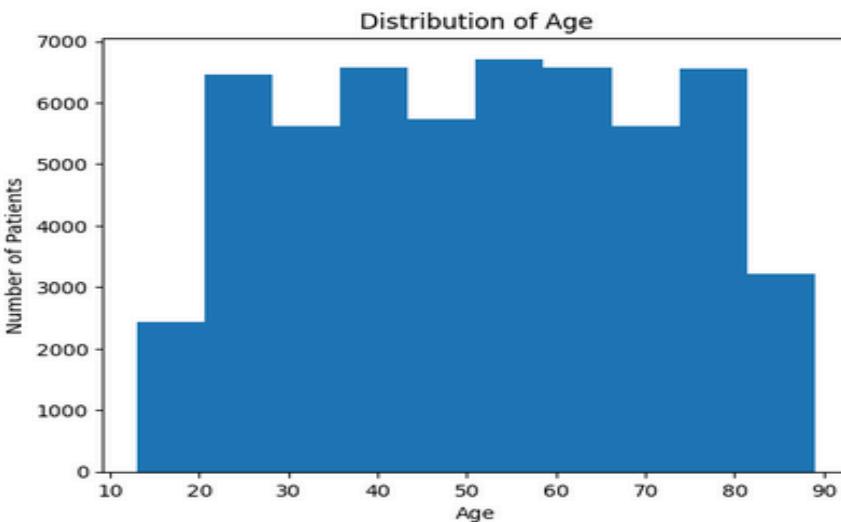
```
data.columns
```

```
Index(['Name', 'Age', 'Gender', 'Blood Type', 'Medical Condition',
       'Date of Admission', 'Doctor', 'Hospital', 'Insurance Provider',
       'Billing Amount', 'Room Number', 'Admission Type', 'Discharge Date',
       'Medication', 'Test Results'],
      dtype='object')
```

Histogram

```
plt.figure()
plt.hist(data['Age'], bins=10)
plt.xlabel("Age")
plt.ylabel("Number of Patients")
plt.title("Distribution of Age")

plt.show()
```



Bar Chart – Gender Distribution

```
[ ] gender_counts = data['Gender'].value_counts()

plt.figure()
plt.bar(gender_counts.index, gender_counts.values)
plt.xlabel("Gender")
plt.ylabel("Count")
plt.title("Gender Distribution")

plt.show()
```

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