```python
In [ ]: import pandas as pd
        import matplotlib.pyplot as plt
        from ydata_profiling import ProfileReport

        # Load the healthcare dataset
        health_df = pd.read_csv("healthcare_dataset.csv")

        # print the head of the datasets to showcase what variables do the dataset includes
        def print_head():
            health_head = health_df.head()
            print(health_head)
            return health_head

        # describe the dataset's discrete / continuous variables
        def describe_stat():
            health_desc = health_df.describe()
            print(health_desc)
            return health_desc

        # use value counts to summary the counts of categorical variables
        def group_by(column_name):
            return health_df[column_name].value_counts()

        # create a histogram of 'Billing Amount' column in healthcare dataset
        def build_histogram():
            plt.hist(
                health_df["Billing Amount"],
                bins=20,
                edgecolor="white",
            )
            plt.xlabel("Billing Amount")
            plt.ylabel("Frequency")
            plt.title("Billing Amount Histogram")
            plt.savefig("Billing_Amount_Hist.png")
            plt.show()

        # main to execute the functions.
        if __name__ == "__main__":
            print_head()
            describe_stat()
            print(group_by("Blood Type"))
            print(group_by("Medical Condition"))
            print(group_by("Admission Type"))
            print(group_by("Test Results"))
            build_histogram()
```

```
            Name  Age  Gender Blood Type Medical Condition Date of Admission  \
0   Bobby JacksOn   30    Male         B-            Cancer        2024-01-31
1   LesLie TErRy   62    Male         A+            Obesity        2019-08-20
2    DaNnY sMitH   76  Female         A-            Obesity        2022-09-22
3   andrEw waTtS   28  Female         O+          Diabetes        2020-11-18
4   adrIENNE bEll   43  Female        AB+            Cancer        2022-09-19

             Doctor                  Hospital Insurance Provider  \
0    Matthew Smith           Sons and Miller        Blue Cross
1   Samantha Davies                  Kim Inc          Medicare
2  Tiffany Mitchell                 Cook PLC             Aetna
3      Kevin Wells   Hernandez Rogers and Vang,       Medicare
4    Kathleen Hanna              White-White             Aetna

   Billing Amount  Room Number Admission Type Discharge Date   Medication  \
0    18856.281306          328         Urgent     2024-02-02  Paracetamol
1    33643.327287          265      Emergency     2019-08-26    Ibuprofen
2    27955.096079          205      Emergency     2022-10-07      Aspirin
3    37909.782410          450       Elective     2020-12-18    Ibuprofen
4    14238.317814          458         Urgent     2022-10-09   Penicillin

   Test Results
0        Normal
1  Inconclusive
2        Normal
3      Abnormal
4      Abnormal
                Age  Billing Amount   Room Number
count  55500.000000    55500.000000  55500.000000
mean      51.539459    25539.316097    301.134829
std       19.602454    14211.454431    115.243069
min       13.000000    -2008.492140    101.000000
25%       35.000000    13241.224652    202.000000
50%       52.000000    25538.069376    302.000000
75%       68.000000    37820.508436    401.000000
max       89.000000    52764.276736    500.000000
Blood Type
A-     6969
A+     6956
AB+    6947
AB-    6945
B+     6945
B-     6944
O+     6917
O-     6877
Name: count, dtype: int64
Medical Condition
Arthritis       9308
Diabetes        9304
Hypertension    9245
Obesity         9231
Cancer          9227
Asthma          9185
Name: count, dtype: int64
Admission Type
Elective     18655
Urgent       18576
Emergency    18269
Name: count, dtype: int64
Test Results
Abnormal        18627
Normal          18517
Inconclusive    18356
Name: count, dtype: int64
```