

## Module 2: Exploration data analysis of visualization and training a model by given attributes

```
# Import the neccessary packages.
```

```
import pandas as pd
```

```
import numpy as np
```

```
import matplotlib.pyplot as plt
```

```
import seaborn as sns
```

In [ ]:

```
# Import the warnings
```

```
import warnings
```

```
warnings.filterwarnings('ignore')
```

In [ ]:

```
data = pd.read_csv('brain_stroke.csv')
```

In [ ]:

```
data.head()
```

In [ ]:

```
df = data.dropna()
```

In [ ]:

```
pd.crosstab(df.stroke, df['age'])
```

In [ ]:

```
df['bmi'].hist(figsize= (7,8), color='green')
```

```
plt.title("Bmi distribution")
```

```
plt.xlabel("Bmi range")
```

```
plt.ylabel("Bmi weight")
```

In [ ]:

```
sns.distplot(x = df['age'], bins = 10)
```

In [ ]:

```
sns.barplot(x = df['gender'], y = df['stroke'])
```

In [ ]:

```
sns.boxplot(x = df['age'], y = df['gender'])
```

In [ ]:

```
sns.violinplot(y = df['avg_glucose_level'], x =df['stroke'])
```

In [ ]:

```
sns.heatmap(df.corr(), annot = True, cmap = 'viridis')
```

In [ ]:

In [ ]:

In [ ]: