

## Module 1: Data validation and pre-processing technique

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

```
import pandas as pd
```

```
import numpy as np
```

In [ ]:

```
# Import the Warnings.
```

```
import warnings
```

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

In [ ]:

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

In [ ]:

```
data.head()
```

In [ ]:

```
data.shape
```

In [ ]:

```
data.info()
```

In [ ]:

```
data.duplicated()
```

In [ ]:

```
data.duplicated().sum()
```

In [ ]:

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

In [ ]:

```
df.head()
```

In [ ]:

```
df.describe()
```

In [ ]:

```
df.columns
```

In [ ]:

```
df['work_type'].unique()
```

In [ ]:

```
df['smoking_status'].unique()
```

In [ ]:

```
df['ever_married'].unique()
```

In [ ]:

```
df['Residence_type'].unique()
```

In [ ]:

In [ ]: