In [ ]:
```
import main
```

In [ ]:
```
df = main.read_csv("Health_Sleep_Statistics.csv")
```

## Descriptive Statistics

In [ ]:
```
df.head()
```

Out[ ]:

| | User ID | Age | Gender | Sleep Quality | Bedtime | Wake-up Time | Daily Steps | Calories Burned | Physical Activity Level | Dietary Habits | Sleep Disorders | Medication Usage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0** | 1 | 25 | f | 8 | 23:00 | 06:30 | 8000 | 2500 | medium | healthy | no | no |
| **1** | 2 | 34 | m | 7 | 00:30 | 07:00 | 5000 | 2200 | low | unhealthy | yes | yes |
| **2** | 3 | 29 | f | 9 | 22:45 | 06:45 | 9000 | 2700 | high | healthy | no | no |
| **3** | 4 | 41 | m | 5 | 01:00 | 06:30 | 4000 | 2100 | low | unhealthy | yes | no |
| **4** | 5 | 22 | f | 8 | 23:30 | 07:00 | 10000 | 2800 | high | medium | no | no |

## Summary Statistics

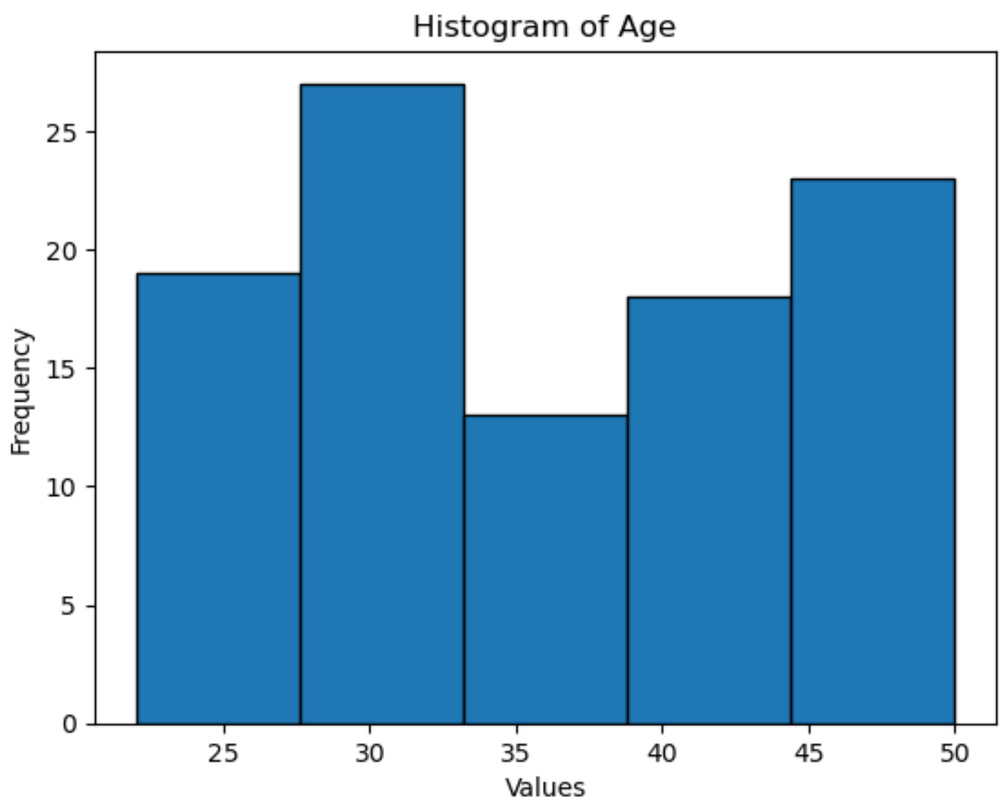
In [ ]:
```
stats = main.get_descriptive_stats(df)
stats
```

Out[ ]:

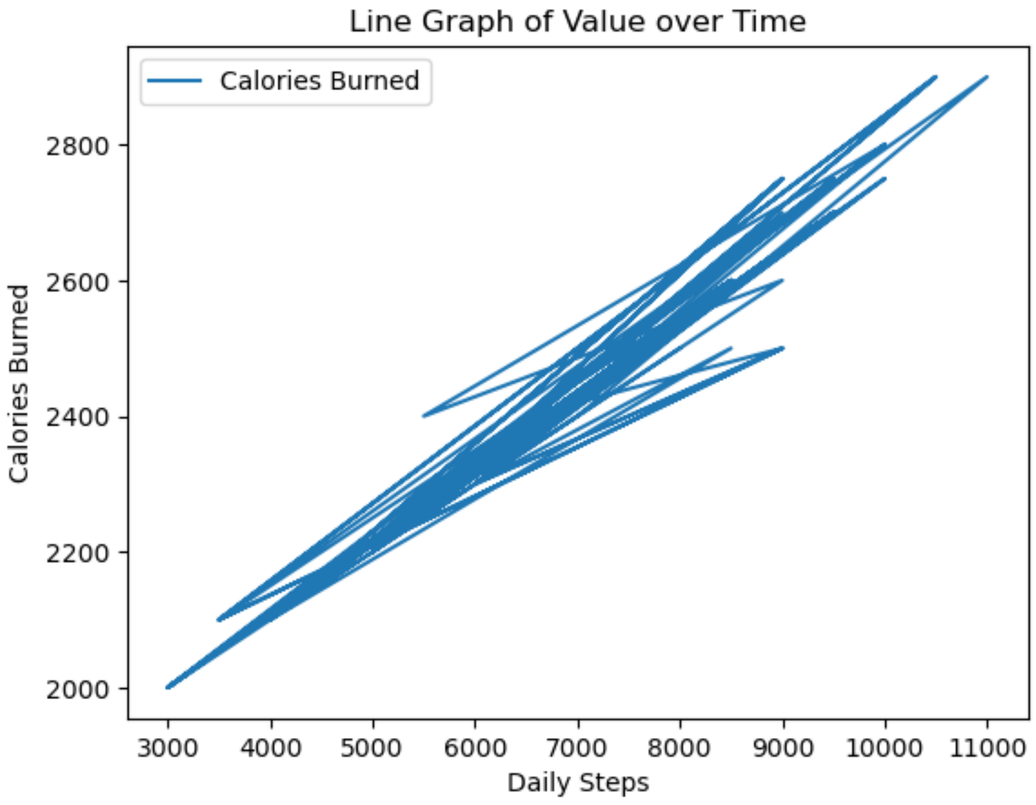
| | User ID | Age | Sleep Quality | Daily Steps | Calories Burned |
|---|---|---|---|---|---|
| **count** | 100.000000 | 100.000000 | 100.000000 | 100.000000 | 100.00000 |
| **mean** | 50.500000 | 36.010000 | 7.000000 | 6830.000000 | 2421.00000 |
| **std** | 29.011492 | 8.454865 | 1.734964 | 2498.706736 | 281.06759 |
| **min** | 1.000000 | 22.000000 | 4.000000 | 3000.000000 | 2000.00000 |
| **25%** | 25.750000 | 28.750000 | 5.750000 | 4750.000000 | 2175.00000 |
| **50%** | 50.500000 | 35.000000 | 7.500000 | 6750.000000 | 2400.00000 |
| **75%** | 75.250000 | 44.000000 | 8.250000 | 9000.000000 | 2700.00000 |
| **max** | 100.000000 | 50.000000 | 9.000000 | 11000.000000 | 2900.00000 |

## Visualization

In [ ]:
```
main.get_histogram(df, "Age")
```




In [ ]:
```
main.get_line_graph(dataframe =  df, x_col =  'Daily Steps', y_col = 'Calories Burned' )
```




In [ ]:
```

```

Out[ ]:

| | User ID | Age | Gender | Sleep Quality | Bedtime | Wake-up Time | Daily Steps | Calories Burned | Physical Activity Level | Dietary Habits | Sleep Disorders | Medication Usage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **0** | 1 | 25 | f | 8 | 23:00 | 06:30 | 8000 | 2500 | medium | healthy | no | no |
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| **4** | 5 | 22 | f | 8 | 23:30 | 07:00 | 10000 | 2800 | high | medium | no | no |

In [ ]:
```

```