

Scenario

We want to see whether the frequency of purchases significantly influences customers' purchase amount.

Hypothesis

H₀: There is no significant influence of purchase frequency on purchase amount.

H_a: There is a significant influence of purchase frequency on purchase amount.

Sig. Level

0.05 or 5%

Appropriate Test

Linear Regression

Performing Test

```
import statsmodels.api as sm
```

```
x = preprocessed_data['Frequency_of_Purchases']
```

```
y = preprocessed_data['Average_Purchase_Amount']
```

```
x_and_constant = sm.add_constant(x)
```

```
model = sm.OLS(y, x_and_constant).fit()
```

```
print(model.summary())
```