

IT 2120-Probability and Statistics

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Lab – 10

```
# Chi-Square Goodness-of-Fit Test for Snack Types

snack_types <- c("A", "B", "C", "D")
observed <- c(120, 95, 85, 100)

expected_prob <- c(0.25, 0.25, 0.25, 0.25)

test_result <- chisq.test(x = observed, p = expected_prob)

print("Chi-Square Goodness-of-Fit Test Results:")
print(test_result)

print("Expected counts:")
print(test_result$expected)
```

(Top Level) ↕

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```
> snack_types <- c("A", "B", "C", "D")
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> observed <- c(120, 95, 85, 100)
> expected_prob <- c(0.25, 0.25, 0.25, 0.25)
> test_result <- chisq.test(x = observed, p = expected_prob)
> print("Chi-Square Goodness-of-Fit Test Results:")
[1] "Chi-Square Goodness-of-Fit Test Results:"
> print(test_result)
```

Chi-squared test for given probabilities

```
data: observed
X-squared = 6.5, df = 3, p-value = 0.08966
```

```
> print("Expected counts:")
[1] "Expected counts:"
> print(test_result$expected)
[1] 100 100 100 100
> |
```

Global Environment	
Data	
test_result	List of 9
values	
expected_prob	num [1:4] 0.25 0.25 0.25 0.25
observed	num [1:4] 120 95 85 100
snack_types	chr [1:4] "A" "B" "C" "D"