```
/Users/bps/PycharmProjects/hypothesis_tesing/venv/bin/python /Users/bps/
PycharmProjects/hypothesis_tesing/main.py


Welcome to the Hypothesis Testing calculator made by ALIAS GEORGE

Select the Calculator (type the no corresponding eg 1 for one mean Large sample)

1. One Mean Large sample
2. One Mean Small sample
3. Two Mean Large sample
4. Two Mean Small sample with both normal and σ1 = σ1
5. Matched Pair t-Test
6. One Variance Test
7. Two Variance Test
8. One Proportion Test
9. Multi Proportion Test
10. Two Proportion Difference Test
11. R and C Analysis Test
12. Goodness Fit Test
11



11. R and C Analysis Test
```

```
No of rows: 3
No of columns: 3
Level of significance: 0.01


Enter the column_1 details
Enter the e11: 23
Enter the e21: 28
Enter the e31: 9


Enter the column_2 details
Enter the e12: 60
Enter the e22: 79
Enter the e32: 49


Enter the column_3 details
Enter the e13: 29
Enter the e23: 60
Enter the e33: 63
```

Testing alternative Hypothesis both are dependent against the Null both are independent
The null must be rejected if χ^2>13.2767

Calculations

Element Name	Observed Frequency	Expected Frequency	Contribution to χ^2
e11	23	16.8	2.288
e21	28	25.049999999999997	0.347
e31	9	18.15	4.613
e12	60	52.64000000000001	1.029
e22	79	78.49	0.003
e32	49	56.87	1.089
e13	29	42.56	4.32
e23	60	63.459999999999994	0.189
e33	63	45.98	6.3

χ^2 = 20.178

Decision

Null both are Independent must be Rejected at level of significance 0.01 and Accept

```
 both are dependent on each other


Process finished with exit code 0
```