6.一個母體比例

[間斷型資料的統計分析]

~~~~~~~~~~~~~ 選擇 ~~~~~~~~~~~~~~

1. The goodness of fit using the pearson chi square test statistic
2. The independent test (cross analysis) of two discrete random variable
3. The homogenous test
4. One population proportion test(With Replacement)
5. One population proportion test(Without Replacement)
6. Two independent population proportions difference test
   (With Replacement)
7. Two independent population proportions difference test
   (Without Replacement)
8. Two dependent population proportions difference test
   The proportions are the probability of multi-nomial distribution.
9. return

選擇 4,

Simulating the Bernoulli probability distribution, B(1,p), p is population proportion. Please input p value

0.5

Only on sample data will be simulated and the drawing method is with replacement, n please input the sample size

100

----------------- inference statistiscs -----------------
--One population proportion test (sample size is small sample) -----
    The sample proportion=   0.4500000000, the sample size=100
    The sample summation=45
    The drawing method is with replacement
    The population proportion null hypothesis value, H0:p=a special value, please input a special value

0.4

Output data,

X1~Bernoulli(p=0.500000)   the sample size=100,
  ----------- simulating data --------------------
0,0,0,1,1,1,1,0,0,0,0,0,0,1,0,0,0,0,0,1,1,1,0,1,0,1,1,0,0,1,0,0,1,0,0,0,1,1,1,0,1,1,1,0,0,
0,1,0,1,0,1,1,0,1,0,1,1,1,0,1,0,0,1,1,1,1,1,0,1,1,1,1,1,1,0,1,1,1,1,1,0,0,0,1,0,1,0,1,0,1,
1,1,1,1,0,0,0,1,1,0
        --------------------- inference statistiscs -----------------------
    --One population proportion test (sample size is large sample) -----
        The sample proportion=   0.5400000000, the sample size=100
        The sample proportion=0.540000,The drawing method is with replacement
 H0: p=0.400000   , p is population proportion
 Z test value=2.857738
 left tail test p-value=   0.9979
 right tail test p-value=   0.0021
 two tailes test p-value=   0.0042
  90% confidence interval for p
  [0.458018 ,   0.621982]
  95% confidence interval for p
  [0.442314 ,   0.637686]
  99% confidence interval for p
  [0.411606 ,   0.668394]

[間斷型資料的統計分析]

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5. One population proportion test(Without Replacement)

6. Two independent population proportions difference test

   (With Replacement)

7. Two independent population proportions difference test

   (Without Replacement)

8. Two dependent population proportions difference test

   The proportions are the probability of multi-nomial distribution.

9. return

選擇 5，

Simulating the Bernoulli probability distribution, B(1,p), p is population proportion.
Please input number of population

50

Simulating the Bernoulli probability distribution, B(1,p), the number of population=50.
Please input successful number of population

25

Only on sample data will be simulated
and the drawing method is without replacement,
n please input the sample size

20

The population proportion null hypothesis value, H0:p=a special value,
please input a special value

0.4

Output data，

```
X1~Bernoulli(p=0.500000)    the sample size=20
----------- simulating data --------------------
0,1,1,1,1,1,0,1,0,0,0,1,0,1,1,0,1,0,1,1
    --------------------- inference statistiscs ------------------------
    --One population proportion test (sample size is large sample) -----
          The popluation size=50 and the successful number=25
          The sample size=20 and the sample summation=12
          The sample proportion=0.600000
          The drawing method is without replacement
   H0: p=0.400000        , p is population proportion
     P(X<12)=0.980469    , X is the successful times of 20 trials
     from the population size=50 and successful number=25
     P(X>12)=0.003887    , X is the successful times of 20 trials
     from the population size=50 and successful number=25
  left sided test p-value=0.980469
  right sided test p-value=0.003887
  two sided test p-value=0.007773
```