**Program: detpattskip**

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The program detpattskip has five arguments.

1.The first question in the varlist (b)

2.The last question in the varlist (c)

3.The common difference (d)

4.The id variable (s)

5.The threshold of repetitions (f)

**Example**

2 surveyors with ids 101 and 102 respectively, are tasked with conducting the assessments of 7 students. The assessment consists of 5 multiple choice questions.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| q1 | q2 | q3 | q4 | q5 | surveyor\_id |
| 1 | 1 | 1 | 2 | 4 | 101 |
| 2 | 2 | 2 | 1 | 2 | 101 |
| 3 | 3 | 3 | 3 | 2 | 101 |
| 4 | 4 | 4 | 1 | 3 | 102 |
| 4 | 4 | 4 | 1 | 3 | 102 |
| 4 | 4 | 4 | 1 | 3 | 102 |
| 2 | 1 | 2 | 1 | 2 | 101 |

To detect if there are any patterns in every second answer starting from q1, run the below codes. In this example, we assume that if a pattern is being repeated more than once, there is a possibility of data fabrication by the surveyor. In other words, the threshold of repetitions (f) is 1 in this case.

clear

use "dummy\_data.dta" // importing the dummy dataset.

detpattskip q1 q5 2 surveyor\_id 1 // Running the program

|  |  |  |  |
| --- | --- | --- | --- |
| surveyor\_id | repfreq | pattname | group |
| 101 | 1 | 222 | pattskip\_q1g2 |
| 102 | 2 | 41 | pattskip\_q2g2 |

From the above table, we can see that surveyor 101 has selected the answer choice 2 in q1,q3,q5 2 times. Similarly, we can see that surveyor 102 has selected answer choice 2 and 1 in questions 2 and 4 respectively. For a better understanding, see the table below.

Note that, in the variable, group, the value pattskip\_qigj indicates that the first number in the pattern is from question i, the second from question i+j and so on.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| q1 | q2 | q3 | q4 | q5 | surveyor\_id |
| 1 | 1 | 1 | 2 | 4 | 101 |
| 2 | 2 | 2 | 1 | 2 | 101 |
| 3 | 3 | 3 | 3 | 2 | 101 |
| 4 | 4 | 4 | 1 | 3 | 102 |
| 4 | 4 | 4 | 1 | 3 | 102 |
| 4 | 4 | 4 | 1 | 3 | 102 |
| 2 | 1 | 2 | 1 | 2 | 101 |

The output is stored in the excel sheet “Skips\_cheats\_`suffix’” where suffix is a local macro containing the date of running the code.

**Use**

The program detpattskip can be used to detect data fabrication by surveyors like in the above example.