## Rule

Custom Formal Fall acy Naming Rules :

- Neg Ant Method : If P, then Q. Not P, errone ously concludes Not Q

Aff Cons Method : If P, then Q. Q is true, errone ously concludes P.
 Cond Swap Method : If P then Q, errone ously believes that if Q then P.

Inc orr Neg Method : If P then Q , errone ously concludes that if Not P then Not Q .

 Dis j S yl Method : Either P or Q . Knowing Q , errone ously concludes Not P .

- Quant <u>Switch Method</u> : <u>x</u> <u>y</u> <u>R</u> (<u>x</u>, <u>y</u>), <u>therefore</u>, <u>y</u> <u>x</u> <u>R</u> (<u>x</u>, <u>y</u>). <u>Err</u> one ously changes the order of quant ifiers, leading to an invalid conclusion

Ill Trans Method : x (Sx → Px), therefore, x (Px → Sx). It is erroneous to infer " all P are S " from " all S are P ". Similarly, from x (Sx ∧ Px), it is erroneous to infer x (Px ∧ Sx). Err one ously converts the terms in the proposition, leading to an invalid conclusion.
Inc orr Inf Method : From x (Sx ∧ Px) infer x (Sx ∧ Px), and from x (Sx ∧ Px) infer x (Sx ∧ Px). It is erroneous to infer " some S are not P " from " some S are P " and vice versa. An invalid inference is made about propositions with existential quant ifiers.
Inv Sub Error Method : `K(x, y)` indicates that individual x knows that y is true. `R (x, y, z)` indicates a substitution error when incorrectly applying knowledge or attributes about y to z.

Let Clause Shift Method : When the structure of a statement is incorrectly adjusted or interpreted, causing the original intent or logical relationship to be misrepresented. For example, a shift in the structure of a let clause leads to an invalid inference.

## Question

Considering the domain of individuals as natural numbers and R representing the "less than" relationship,  $x \ yR(x, y)$  states that for any natural number, you can find another natural number greater than it, meaning there is no largest natural number. However,  $y \ xR(x, y)$  suggests that there is a natural number greater than any other natural number, implying the existence of a largest natural number. Here, the premise is true, but the conclusion is false,

making the reasoning invalid.

What type of formal fallacy is this?

- A. NegAnt Method
- B. AffCons Method
- C. CondSwap Method
- D. IncorrNeg Method
- E. DisjSyl Method
- F. QuantSwitch Method
- G. IllTrans Method
- H. IncorrInf Method
- I. InvSubError Method
- J. LetClauseShift Method

Please give your answer in the format [[A/B/C/D/E/F/G/H/I/J]].

## Answer

[[F]]

Response

[[F]]