



JOÃO PEDRO ANDRADE

True

a)

$((10 > 5 \text{ or } 3 < 7) \text{ and } (\text{True or False and not}(\text{False})) \text{ or not}(8/2 == 4) \text{ and } ('Python' != 'python' \text{ or True})))$

$((\text{True and True or not}(8/2 == 4) \text{ and } ('Python' != 'python' \text{ or True})))$

$(\text{True or False and } ('Python' != 'python' \text{ or True}))$

$\text{True or False and True} \rightarrow \text{True or False} \rightarrow \text{True}$

b)

$((\text{not}(6/2 - 6) == 6 \text{ and } (\text{True or False and not}(\text{True})) \text{ or not}(15\%4 > 1) \text{ and } (\text{False or True})))$

$(\text{False and True}) \text{ or not}(15\%4 > 1) \text{ and } (\text{False or True})$
 $\rightarrow \text{False}$

c)

$((\text{not}(5 * 2 < 12) \text{ or } (\text{True and False and not}(\text{False})) \text{ and not}(7/2 == 3.5) \text{ or } ('OpenAI' == 'openai' \text{ and True})))$

$(\text{False or False}) \text{ and not}(7/2 == 3.5) \text{ or } ('OpenAI' == 'openai' \text{ and True})$

$\text{False and False or False} \rightarrow \text{False}$