

28 Sept 2022

lec. 14

logical Operators - basically used to combine conditional statements,

AND OR NOT

eg:-
 $a = 5$
 $b = 4$

$\text{print}(a \text{ and } b) \rightarrow \underline{\text{returns True (4)}}$

false $\leftarrow \text{print}(a < 5 \text{ and } b == 4)$

true $\leftarrow \text{print}(a <= 5 \text{ and } b == 4)$

true $\leftarrow \text{print}(a < 5 \text{ or } b == 4)$

~~4~~ $\leftarrow \text{print}(5 \text{ and } 4)$

~~0~~ $\leftarrow \text{print}(0 \text{ and } 4)$

~~4~~ $\leftarrow \text{print}(0 \text{ or } 4)$

false $\leftarrow \text{print}(\text{not}(a))$

$a = \text{false}$

true $\leftarrow \text{print}(\text{not}(a))$

Truth table for
AND

T	T	T
T	F	F
F	T	F
F	F	F

Truth table for
OR

T	T	T
T	F	T
F	T	T
F	F	F

<u>and</u>	will return True if both statements are true
<u>or</u>	will return True if one of the statements is true
<u>not</u>	reverse the result or negate the result