

Boolean & Branching

Discussion 1

	Data type	value
1 / 2	float	0.5
1 // 2	int	0
1 > 2`	bool	False
True	bool	True
"True"	str	"True"
3 < 3 and $3/0 > 0$	bool	False
3/0 > 3 and $3 < 0$	ZeroDivisionError: division by zero	
3 > 0 or 3/0 != 1	bool	True
5 < 6 > 3	bool	True

Discussion 2

	output	Discussion	
Line1	True	 Comparison has higher priority than and operator. chained comparisons False or False or True => True	
Line2	10 3 2	Multiple assignment	
Linez	1032	automatic buffer	
		floor division	
		int type casting truncate	
Line3	bigger	a = 17, > 8 true path	
Line4	small	Indentation, same group as line 3	
Line5	No display	a<9 is false so skip line 5	
Line 6	small	No indentation, Statement after if a<9	

Discussion 3

Access granted.

Discussion 4:

Check if the alarm should be triggered alarm_triggered = motion_sensor and system_armed and (door_sensor or window_sensor)

Discussion 5:

Access granted.

Discussion 6:

Item 'durian' is unknown and will not be categorized. Item 'tomato' is unknown and will not be categorized.

Fruits: 3 Vegetables: 3