Module 3B: Truth tables and logic gates

MTH 225
23 Sept 2020

Agenda

- Review of Daily Prep activity + Q/A time
- Activity: Building truth tables for more complicated statements, checking with logic gates
- Wrap up with ungraded quiz + feedback time

Consider the statement $A \rightarrow (B \wedge C)$. Under which of the following conditions will this statement be true?

- A, B, and C are all true
- A is true, B is false, C is true
- A is false, B is true, C is false
- A is false, both B and C are true

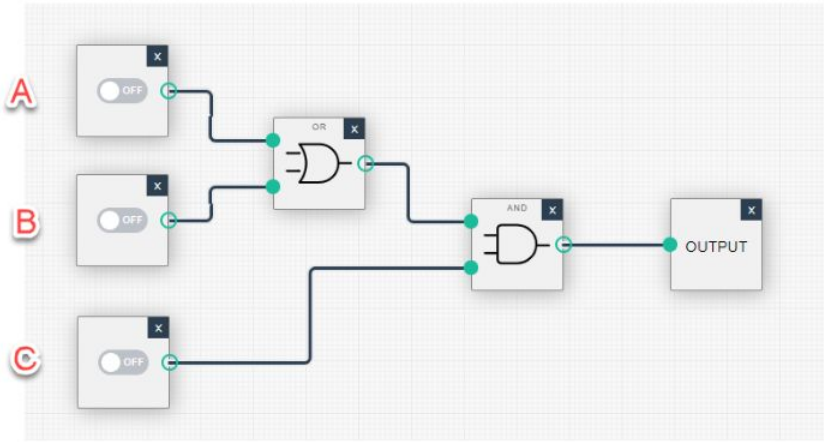
The Python function `foo` is shown. If a user enters `foo(3, 1, 1)`, the output is

```
def foo(x,y,z):
    if ((x > 2) and (y < 5)) or (z > 0):
        print(z)
    else:
        print(x+y)
```

- 1
- 2
- 3
- 4
- 5
- An error message

To 0

In the logic gate setup shown here, all three inputs A,B and C are currently switched off. Which of the following combinations would make the output node light up?



A on, B off, C on

A off, B off, C on

A on, B on, C off

A off, B on, C off

To 0

Q&A time

Activity: https://jamboard.google.com/d/1cBII1hwepl8jn5-dfdgpzXARnpUzwgy6gmNnUy8iyjU/edit?usp=sharing

Consider the statement $(p \to q) \to r$. If p is true, q is false, and r is true, then this statement is

- True
- False
- Not enough information to determine

Feedback:
http://gvsu.edu/s/1rF

Add sticky notes for comments, ideas, and questions.