



Computing with dominoes (2:50)

$$f(x) = x$$

$$0 \rightarrow 0$$

$$1 \rightarrow 1$$

$$f(x) = \neg x$$

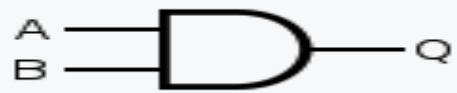


$$f(x) = 0$$



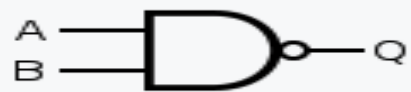
$$f(x) = 1$$











10

1

1


```
def myFunc(s) -> bool: # recursive implementation
    a, b = s[0] == '1', s[1] == '1'

    if len(s) > 2:
        temp = '1' if (a ^ b) else '0' # perform xor
        s = list(s[1:len(s)]) # XOR result -> 0th string item
        s[0] = temp
        return myFunc(''.join(s))
    else: # base case
        return '1' if (a ^ b) else '0'
```




Questions?

Thank you!

References

- <https://en.wikipedia.org/wiki/Bit>
- <https://en.wikipedia.org/wiki/Transistor>
- https://www.youtube.com/watch?v=F_Riqjdh2oM
- https://en.wikipedia.org/wiki/Logic_gate