

Quiz

It's quiz time! Test yourself by solving these questions about recursion.

1

Recursive implementations are always less space-consuming than iterative implementations.

☐ A) True

☐ B) False

2

Fill in the blank for the following recursive function which calculates the power of a base raised to an exponent:

```
def pow(base,exp):  
    if exp == 0:  
        return 1  
    else:  
        return _____
```

☐ A) `base * exp`

☐ B) `base * (exp - 1) * pow(base,exp)`

☐ C) `base * pow(base, exp - 1)`

☐ D) `exp * pow(base, exp - 1)`

3

What is the output of the following code?

```
def fibonacci(n):  
    if n==1:  
        return 0  
    elif n==2:  
        return 1  
    else:  
        return fibonacci(n-1)+fibonacci(n-2)  
print(fibonacci(7))
```

☐ A) No output

☐ B) 7

☐ C) 0

☐ D) 8

4

Only recursively defined functions can be implemented recursively.

☐ A) True

☐ B) False

CHECK ANSWERS