**What happens next? (A)**

```
def factorial(n):
    if n == 0:
        return 1
    else:
        return n*factorial(n-1)

# Calls: factorial(3)
factorial
n 3
```

**How to Combine? (A)**

```
def reverse(s):
    """Returns: reverse of s
    Precondition: s a string"
    # 1. Handle base case
    if len(s) <= 1:
        return s
    # 2. Break into two parts
    half = len(s)//2
    left = reverse(s[:half])
    right = reverse(s[half:])
    # 3. Combine the result
    return right + left
```

**What is the Base Case? (A)**

```
def reverse(s):
    """Returns: reverse of s
    Precondition: s a string"
    # 1. Handle base case
    if s == "":
        return s
    # 2. Break into two parts
    left = reverse(s[0])
    right = reverse(s[1:])
    # 3. Combine the result
    return left + right
```

**Alternate Implementation (A)**

```
def reverse(s):
    """Returns: reverse of s
    Precondition: s a string"
    # 1. Handle base case
    if len(s) <= 1:
        return s
    # 2. Break into two parts
    half = len(s)//2
    left = reverse(s[:half])
    right = reverse(s[half:])
    # 3. Combine the result
    return left + right
```

**Does this work?**

CORRECT

A: YES

B: NO