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PROBLEM 4-1 (2 points possible)

Consider the following Python procedure. Specify its order of growth.

```
def modten(n):  
    return n%10
```

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PROBLEM 4-2 (2/2 points)

Consider the following Python procedure. Specify its order of growth.

```
def multlist(m, n):  
    '''  
    m is the multiplication factor  
    n is a list.  
    '''  
    result = []  
    for i in range(len(n)):  
        result.append(m*n[i])  
    return result
```

$O(\text{len}(n))$ 


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PROBLEM 4-3 (2/2 points)

Consider the following Python procedure. Specify its order of growth.

```
def foo(n):  
    if n <= 1:  
        return 1  
    return foo(n/2) + 1
```

$O(\log(n))$ 

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PROBLEM 4-4 (2/2 points)

Consider the following Python procedure. Specify its order of growth.

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




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PROBLEM 4-5 (2/2 points)

Consider the following Python procedure. Specify its order of growth.

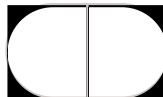
```
def baz(n):  
    for i in range(n):  
        for j in range(n):  
            print i,j
```

$O(n^2)$ 

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