MITx: 6.00.1x Introduction to Computer Science and Programming Using Python

Help

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Problem 4

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Problem 4-1

1/1 point (graded)

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

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

O(1) ▾ ✓

Submit You have used 1 of 1 attempt

Problem 4-2

1/1 point (graded)

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(len(n)) ▾ ✓

Submit You have used 1 of 1 attempt

Problem 4-3

0/1 point (graded)

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

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

O(1) ▼ ✗

Submit You have used 1 of 1 attempt

Problem 4-4

1/1 point (graded)

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

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

O(n) ▼ ✓

Submit You have used 1 of 1 attempt

Problem 4-5

1/1 point (graded)

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) ▼ ✓

Submit You have used 1 of 1 attempt

Problem 4

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