

# [15-112] Lecture 18

## Lecture 18: Big-O Worksheet

What is the efficiency of the following code?

```
def bigOh1(n):  
    x = y = 0  
    while (x < n):  
        while (y < n):  
            print("y")  
            y += 3  
        print("x")  
        x += 4
```

- A.  $O(1)$
- B.  $O(N)$  -> Answer
- C.  $O(N^2)$
- D.  $O(\log N)$
- E.  $O(N \log N)$
- F. I don't know

## Lecture 18: Big-O Worksheet

What is the efficiency of the following code?

```
def bigOh2(N):  
    L = range(10**4)  
    for x in range(0, 2**N, 2**N/N**2):  
        if x in set(L):  
            print ("beep boop")  
    print("my heart is in the work")
```

- A.  $O(1)$
- B.  $O(N)$
- C.  $O(N^2)$
- > Answer
- D.  $O(\log N)$
- E.  $O(N \log N)$
- F. I don't know