Para cada uma das funções abaixo, diga a sua ordem - Notação **O(f(N))**)

1. **O(N)**

**def F1(N):**

 **s, i = 0, 1**

 **while i < N:**

 **s = s + N \* N**

 **i = i + 1**

 **return s**

1. **O(log N)**

**def F2(N):**

 **s = 0**

 **while N > 0:**

 **s = s + N \* N**

 **N = N // 2**

 **return s**

1. **O(N)**

**def F3(N):**

 **if N < 1: return 0**

 **return N + F3(N - 1)**

1. **O(N.log N)**

**def F4(N):**

 **s = 0**

 **for i in range(N):**

 **t, j = 0, 1**

 **while j < N:**

 **t = t + i \* j**

 **j = j \* 10**

 **s = s + t**

 **return s**

1. **O(log n)**

**def F1(n):**

 **s, i = 0, 1**

 **while i < n:**

 **s = s + n \* n**

 **i = i \* 10**

 **return s**

1. **O(n)**

**def F2(n):**

 **s = 0**

 **while n > 0:**

 **s = s + n \* n**

 **n = n - 1**

 **return s**

1. **O(n)**

**def F3(n):**

 **if n < 1: return 0**

 **return n + F3(n - 1)**

1. **O(log2 n) = O(log n). O(log n)**

**def F4(n):**

 **s, i = 0, 1**

 **while i <= n:**

 **s = s + F1(n)**

 **i = i \* 10**

 **return s**

1. **O(n.log n)**

**def F5(n):**

 **s, i = 0, 1**

 **while i <= n:**

 **s = s + F2(n)**

 **i = i \* 10**

 **return s**