

Task 1

$$f(N) = 8N^8 + 7N^7 + N$$

$$\Theta(N^9)$$

☐ A.

$$O(N^7)$$

☐ B.

$$\Omega(N^{10})$$

☐ C.

Task 2

$$T(N) = 4T\left(\frac{N}{3}\right) + O(N^2)$$

$$\Theta(N^2)$$

☐ A.

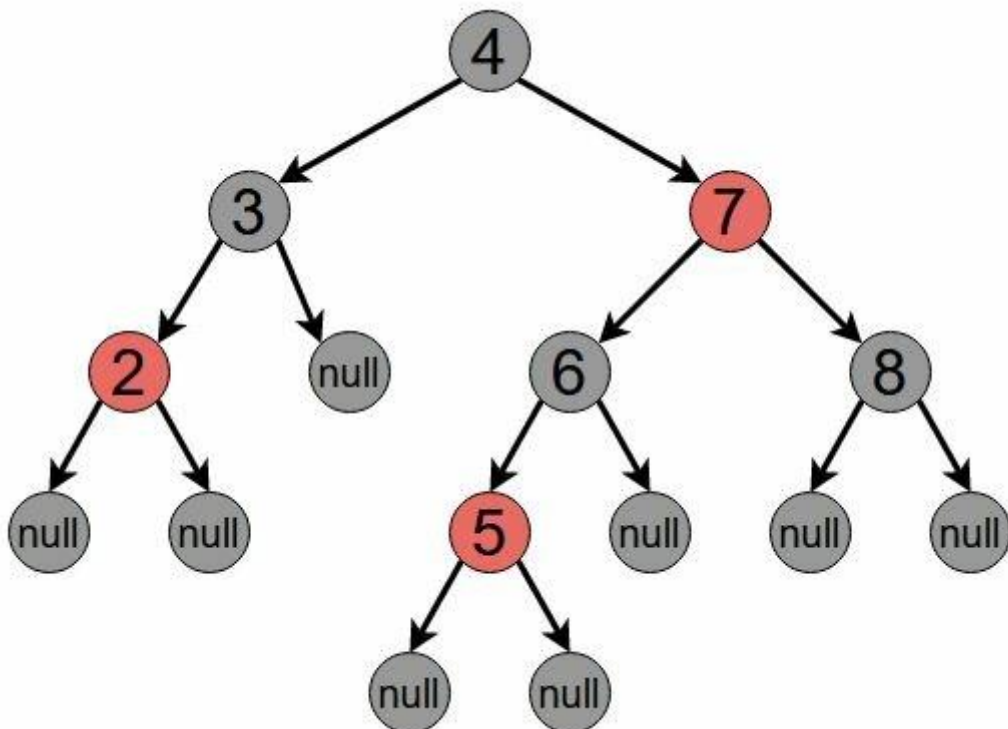
$$\Theta(N^{\log_4 3})$$

☐ B.

$$\Theta(N^{\log_3 4})$$

☐ C.

Task 4



Task 5

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 0 |
| 2 | 1 | 0 | 1 | 0 | 0 |
| 3 | 0 | 1 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 1 |
| 5 | 0 | 0 | 0 | 1 | 0 |

Task 6

