

Ex3

Write sample code segments for the following recurrence relations and plot the graphs to depict the number of steps for different sizes of n

- 1) $T(n) = T(n-1) + 1$
- 2) $T(n) = T(n-1) + n$
- 3) $T(n) = T(n-1) + \log(n)$
- 4) $T(n) = 2T(n-1) + \log(n)$
- 5) $T(n) = T(n/2) + n$
- 6) $T(n) = T(n/2) + \log(n)$
- 7) $T(n) = 2T(n/2) + \log(n)$