Student ID 1 & 2:*(Do this in pairs)*

1 Solve the following recurrence relations either through the tree method or the master method:

  1. $T(n) = 2T(n-1) + 1$

  2. $T(n) = 3T(n/3) + n$

  3. $T(n) = 2T(n/2) + n$

  4. $T(n) = T(n/3) + T(2n/3) + n$

  5. $T(n) = 2T(n/2) + 1$

  6. $T(n) = T(n/3) + \log n$

  7. $T(n) = 9T(n/3) + n^2$

  8. $T(n) = 4T(n/2) + n^3$