***Bài 5:***

T(0)=T(1) =1

T(n) = C+ (T(n-1) + T(n – 2))

+ T(n -1) ≈ T(n – 2)

T(n) = 2T(n -2) + C

= 2\*(2T(n -4) + C) +C

= 4T(n -4) +3C k = 2

= 8T(n – 6) +7C k = 3

= 16T(n – 8) +15C k = 4

= 2kT(n – 2k) + (2k - 1)\*C

n – 2k = 0 → k = n/2

T(n) = 2n/2 T(0) + (2n/2 – 1)\*C.

= 2n/2+ (2n/2)\*C – C

= 2n/2 \*(C + 1) – C

T(n) ≈ 2n/2→ O(n) = 2n/2