Tubral-4

Prakher Panele, 17-28, 2016 406

T(n) = 3T(n/n)+n2  $a = 3, b = 2, y(n) = n^2$ "." a, b are constant a J(n) is the Lunchen - Marter M. · Prapplicable C = degna = c = degna = legn 3=158 n (= n1.58 whichis n2 7n1.58 Case 3 Ps applied here T(n)=0(n2) T(n)=47(n/2)+n2 a=4, b= 2, 1(n)=n2. · · as h are Constant e J(n) is the function. .. Marter Ih is applicable. C= degna => leg\_2 2= 2 leg\_2 2= 2 leg\_2 = 2 :. n°-n2>) n°-J(n) Care 2 Ps applied T(n)= ( n) leg n)  $T(n) = T(n/2) + 2^n$ a=1, b=2, y(n=2h a & b are constant a y(n) is the functions :. Marter's The 1's applicable; (-lega = legz). n = n = 1; y(n) 3 nc Case 3 is applied => T(n)= (12n).

T(n)= 2n -T (n/2)+nn 1  $a = 2^n, b = 2, y(n) = n^n$ '- a is not constant, its value depends on , · .: Marters Th PS noof applicable here. T(n)=16 T(n/a)+n C a=16,h=4,d(n)=n : ash are Constants of (n) is the function C = logn Cl. clega16 = cleg4 42 = 2cleg4 > 2 n'= n2 -: d(n) < n6 Case 1 95 applied here. T(n)=0(n2) T(n)=27/n2)+ndey n.  $a = 2, b = 2, J(n) = n \operatorname{deg} n.$ a, b are constant a d(n) is the function calleg a nc=n=n=)...(n)),nc Cox 3 is applied. T(n)= O(ndogn) T(n)= 0.5 T(n/2)+1/A a = 0.5, b = 2, f(n) > 1/2·: OC) Marton's M. is not applicable.

T(n)= 47(nh)+deg n a = 4, b = 2, 4(n) = leg n.a ab are constant, I(n) is the function C = log a = log 4 = 2  $n' = n^2$ y(n) <n Case I applied T(n)=(l(n2) T(n)=3T(n/2)+n a = 3, b = 2, 4(n) > )as bare Constant & I(n) ist re-:. Mortors The is applicable :-C = deg, a = deg, 3=0.18. n = n0.158 nogy(n)cn2 Care I's capplied (CO) T(n) = (g(n).58)