50 T(n)= N

Implementation 02

Answert : 2(a)

Nomes Shabab Abdullah

ID: 20301005

Implementation 018

Implementation 01:

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

$$= 2T(n-2) + C$$
Here,
$$T(n-1) \approx T(n-2)$$

the second implementation is O(n)2+C+C+n solution is O(n)2+C+C+nSecond implementation will take sorten period or $\frac{3c+(n-2)+3c}{c}$

$$= 4T (n-2) + 3c$$

than the first one. So, the second implementation than the first one. So, the second 37+(e-n)78 =

we assume, n-k=0 of

$$=2^n$$

.: The Ame complexity will be 0 (2")

Names Shabab Abdullah

ID! 20301005

Implementation 02

So, time complexity will be O(n) 200 moitotransiquet

we can see the first implementation is $O(2^n)$ and Now, here we the second implementation is O(n). So we can say second implementation will take sorter period of time than the first one. So, the second implementation is much faster than the first implementation. T(0)= 2KT (0-1)+ (2K-1)

Answer 3 26

of use assume, si-k=0 X=IXE 80, T. (B)=02"C-C

.. The time complexity will be (2)