

الرجوع إلى كاشاني

٩٤٢١.٥٩

$$T(n/2) + T(n/2) + n/2$$

$$T(n) = \underbrace{T(n/2) + T(n/2) + n/2}_{T(n/2) + T(n/2) + n/2} = 2T(n/2) + n/2 + n$$

$$T(n) = \frac{(n + 2n/2 + 4n/4 + \dots + 2^n \cdot n/n)}{\log(n)} + \frac{T(1) \times n}{O(n)} = n \log n + n$$

$$T(n) = O(\log n \times n) = O(\log(n) \times n)$$

(ط'طاس) $T_0 = T_1 = 0$

$$\frac{T(n)}{n} = 1 + \frac{2T(n/2)}{n/2}$$

$$\frac{T(n/2)}{n/2} = 1 + \frac{2T(n/4)}{n/2}$$

سؤال ٢

QUICKSORT

QUICKSORT $\frac{t}{u}$ ✓

QUICK $\frac{r}{s}$ $\frac{t}{u}$ ✓

↓
ICK $\frac{Q}{r}$ $\frac{s}{t}$ $\frac{u}{u}$ ✓

↓
ICK $\frac{Q}{Q}$ $\frac{r}{s}$ $\frac{t}{u}$ ✓

↓
CIK OQRSTU