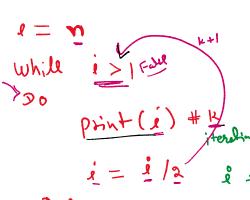




K+1 Herdr Will moder



Duch	or len
EN	condita

Ore pos

1	1	9	3	4	5	•••	K	K+D
	N=0	1 _ n	11 5 2	2 1	$\frac{0}{1} = \frac{0}{2}$	•••	7	n
•	200	2 21	4 23	8 23	16 24	-	2	314

Done

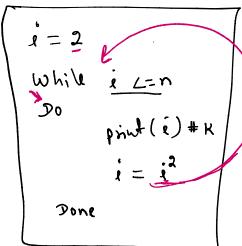
$$T(n) = \underline{k}$$

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

$$\frac{1}{9} = 1 \Rightarrow \frac{n}{2^k} = 1 \Rightarrow 2^k = n$$

$$|09_2|^k = |09_2|^n \Rightarrow |k| |09_2|^2 = |09_2|^n$$

$$|k = |09_2|^n$$



T(n) = K

 $|\omega_{\lambda}|^{2} = |\omega_{\lambda}(n)$ T(n) = () (log log n) / 2 109 (2) = 109 2(n)

102 3/ = 1092 1092 N 12 103/2 = 103 2 1037 M

12 = 100 102 n

Questin

MIW

WHILE & > 1

privt(i)

Done

Nested loop time Complexity



for (i=1; i < n; i++) (j=13,12n j=ix2)

Pint (i,i)

De pender

for (i=1; i Ln; i++) sfor (1=1; 1<=1; i++) print (i,i)

inner loss dopends on outer loss

$$a = log(n)$$

$$A = n$$

$$T(n) = (A \cdot B)$$

$$= 2 + 2 + 2 + 2$$

$$= 2 + 2 + 2 + 2$$

$$= 2 + 2 + 2 + 2$$

$$= 2 + 2 + 2 + 2$$

$$= 2 + 2 + 2 + 2$$

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$$= 2 + 2 + 2 + 2$$

$$= 2 + 2 + 2 + 2$$

$$= 2 + 2 + 2 + 2$$

$$= 2 \times 4$$

$$= 2 \times$$

$$\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} \int_{-\infty}^{$$

for
$$(i = 2; i \le n^2; i = i + 2)$$

for $(i = n^2; i \le n; i = i + 2)$

for $(k = n^2; k > 2; k = \sqrt{k})$

print ("Nello")

Y= D(1)

print ("Nello")

$$T(n) = 0 \left(\underline{X} \cdot \underline{Y} \cdot \underline{Z} \right) \Rightarrow 0 \left(n^2 \cdot 1 \cdot \log \log n \right) \rightarrow 0 \left(n^2 \log \log n \right)$$

R=C

$$12 = n^2$$
; $k > = 2$; $N = (K)^{1/2}$

k+1

 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{12}$ $\frac{$ N=1 N20 N/21 N22 N23 \Rightarrow $2^{k} = 102(n)$ \Rightarrow $k \cdot 102(n) = 102 \cdot 102(n)$ \Rightarrow $y = \log \log n$