

* Nikunj & Donuts :->

input = $\sum_{i=0}^2 \{ 300, 900, 600 \}$;

$$2^0 \times 300 = 300$$

$$2^1 \times 900 = 1800$$

$$2^2 \times 600 = 2400$$

$$\underline{4500}$$

thumbajasti

300, 600, 900

$$300 + 1200 + 1800 = 3300 \text{ miles (optimal)}$$

900, 600, 300

$2^0 \quad 2^1 \quad 2^2$

$1 \quad 2 \quad 3$

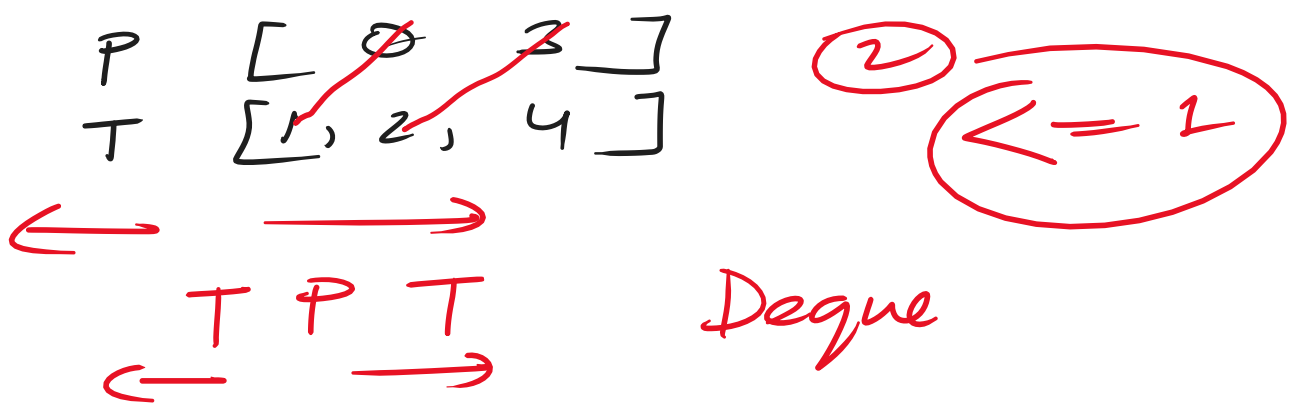
$IL \ll 1$
 $IL \ll 0$
 $IL \ll 1$
 $IL \ll 2$

$2^3 \quad 2^1$

$\frac{0001}{2^0}$

$0001 \rightarrow 1$
 $0010 \rightarrow 2$
 $0100 \rightarrow 3$
 $1000 \rightarrow 4$

Policemen & Thieves :->



Approach:

[~~T~~, ~~T~~, ~~P~~, ~~P~~, ~~T~~, ~~P~~] k=2

Step	Index	Character	Task	Queues (T, P)	Result
0	0	T	Add to T	T[0], P[]	0
1	1	T	Add to T	T[0,1], P[]	0
2	2	P	Add to P	T[0,1], P[2]	✓
			Pop T[0], P[2]		1
3	3	P	Add to P	T[1], P[3]	✓
			Pop T[1], P[3]		2
4	4	T	Add to T	T[4], P[]	2
5	5	P	Add to P	T[4], P[5]	✓
			Pop T[4], P[5]		3

P P P T T (while) T[] P[]

Relation b/w classes in a project:-

