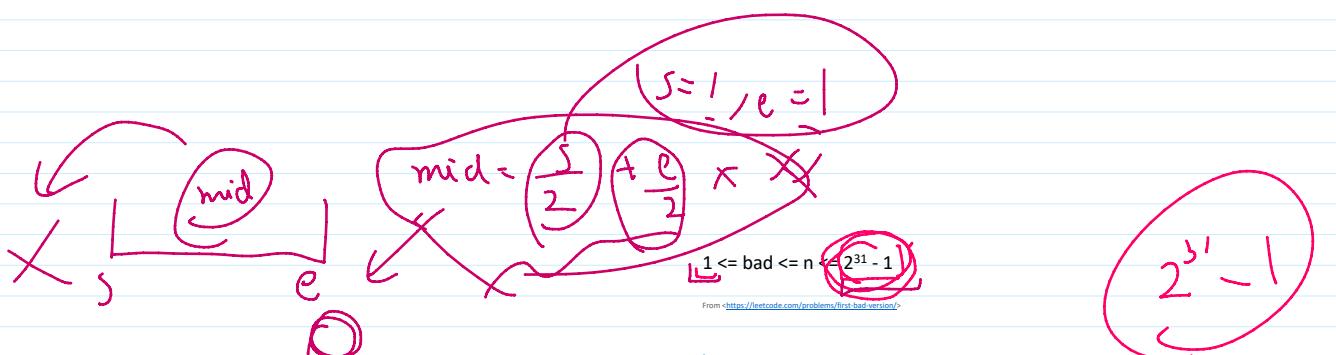
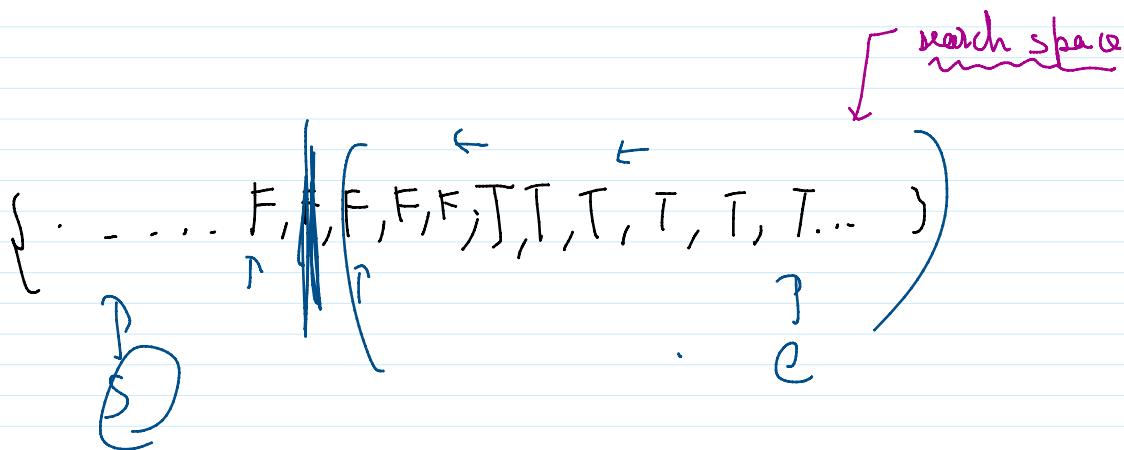


$\begin{matrix} \text{F} & \text{T} & \text{F} & \text{T} & \text{F} & \text{T} \\ \text{B} & \text{B} & \text{B} & \text{B} & \text{B} & \text{B} \end{matrix} \rightarrow 2$
 $\begin{matrix} \text{F} & \text{F} & \text{F} & \text{F} & \text{T} \end{matrix} \rightarrow 1$



```

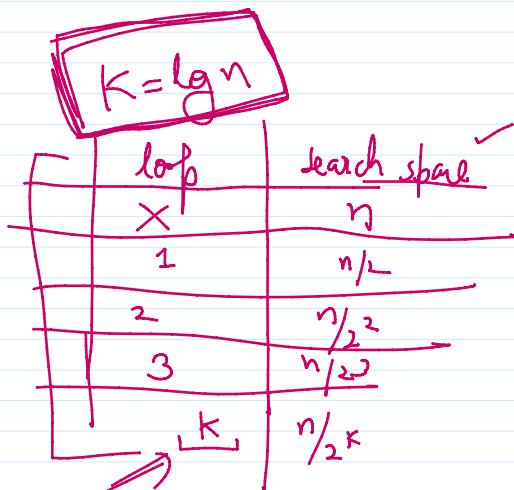
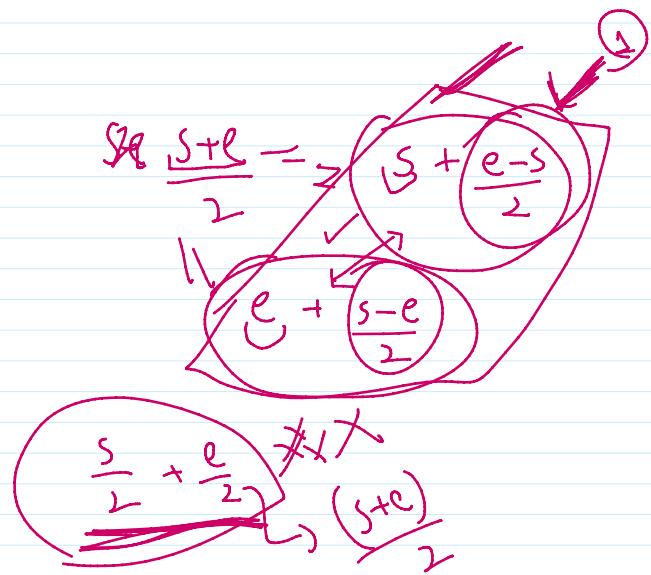
int s = 1;
int e = n;
int ans = n;
while(s <= e){
    int mid=(s+e)/2;
    if(isBadVersion(mid)){
        ans = mid;
        e = mid-1;
    }else{
        s=mid+1;
    }
}
return ans;

```

$0 \rightarrow 2^{32}-1$
 $-2^{31} \rightarrow 2^{31}-1$

$$mid + \log_2 = l$$

$l =$
 $l =$



$$\left\{ \begin{array}{c} \text{ } \\ \text{ } \end{array} \right\} \quad \left. \begin{array}{c} \frac{n}{2^K} = 1 \\ n = 2^K \\ K = \lg_2 n \end{array} \right\}$$

$$10 = 2 \times k \quad | \quad 5$$

$$15 = 3 \times k \quad | \quad 5$$

$$k = \frac{15}{3}$$

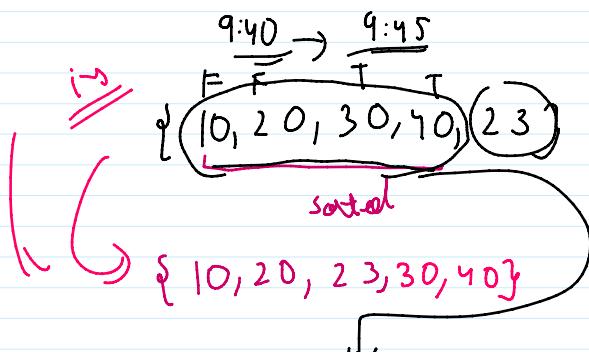
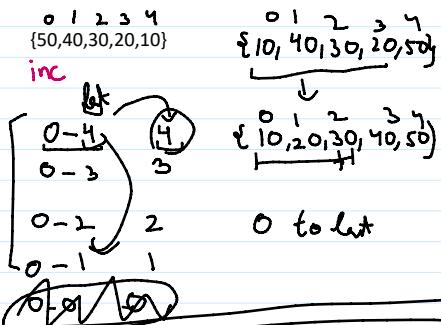
$$8 = 2^{??}$$

$$16 = 2^{??}$$

$$1024 = 2^{??}$$

$$?? = \log_2 1024$$

Selection Sort ka code!!



$$\{10, 20, 30, 40, 23\}$$

idx

$$\{10, 20, 30, 40, 40\}$$

idx

$$\{10, 20, 30, 30, 40\}$$

idx

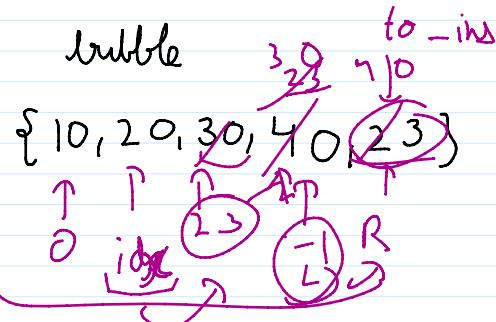
ali

23

$$\{10, 20, 23, 30, 40\}$$

idx

bubble



$\{10, 20, 23, 30, 40\}$ \uparrow
 \uparrow
idx

