

Minimum Platforms

Yha pe hme km sekm platform use krne h to hm arr and dep array ko sort krlenge and do pointer maintain krenge to keep track of ki train kb arrive hori h and kb depart hori h. agr ek train k aane se pehle dusri train depart hojari h this means ki ek platform khali hogya to keep track of current platform and max platform we use two variables platform_needed and ans. platform needed is incremented when a new train arrives before the departure of other train and decremented when a train leaves and then a new train arrives.

Then a comparision is done to store max in the ans that if platform_needed > ans then ans=platform_needed

We move either arrival or departure pointer because if a train has departed then the platform is decremented but for the arrived train the platform must also increase so when arr pointer moves then the platform is again incremented as arrival is less than current train departure.

```
int calculateMinPlatforms(int at[], int dt[], int n) {
    // Write your code here.
    sort(at, at+n);
    sort(dt, dt+n);
    int plt=1, maxplat=1, arr=1, dep=0;
    while(arr<n && dep<n)
    {
        if(at[arr]<=dt[dep])
        {
            plt++;
            arr++;
        }
        else
        {
            plt--;
            dep++;
        }
        maxplat=max(plt, maxplat);
    }
    return maxplat;
}
```