

1450 - AIRPORT

第十組
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QUESTION

E

W

EXAMPLE

Times	Roads	W	E
1		A1,A2,A3	B1,B2
2			B3,B4,B5
3		A4, A5	

2 1 0

0 1

EXAMPLE

Times	Roads	W	E
1		A1,A2,A3	B1,B2
2			B3,B4,B5
3		A4, A5	

2 1 0

0

EXAMPLE

Times	Roads	W	E
1		A1,A2,A3	B1,B2
2			B3,B4,B5
3		A4, A5	

1 0

0 1 2 3

TRUE v.s FALSE

Roads	W	E
1	A1,A2,A3	B1,B2
2		B3,B4,B5
3	A4,A5	

Answer : 4

Roads	W	E
1	0,1,2,3,4	0,1,2,3
2	0,1,2,3	0,1,2,3
3	0,1,2,3	0,1,2,3

Answer : 3

Times	W	E
1	WRONG!!	0,1
2		0,1,2,3,4
3	0,1,2,3	0,1,2,3

Roads	W	E
1	0,1,2	0,1
2	0,1,2	0,1,2,3
3	0,1,2,3	0,1,2,3

SOLUTION1

Roads	W	E
1	A1,A2,A3	B1,B2
2		B3,B4,B5
3	A4,A5	
Total	5	5
Take off	3-1=2	

SOLUTION1

1) Time1 W飛 · Time2 W飛

Roads	W	E
1	0,1,2	0,1
2	0,1	0,1,2,3,4
3	0,1,2	0,1,2,3,4

ANS: 4

2) Time1 W飛 · Time2 E飛

Roads	W	E
1	0,1,2	0,1
2	0,1	0,1,2,3,4
3	0,1,2,3	0,1,2,3

ANS: 4

3) Time1 E飛 · Time2 E飛

Roads	W	E
1	0,1,2	0,1
2	0,1,2	0,1,2,3
3	0,1,2,3,4	0,1,2

ANS: 4

4) Time1 E飛 · Time2 W飛

Roads	W	E
1	0,1,2	0,1
2	0,1,2	0,1,2,3
3	0,1,2,3	0,1,2,3

ANS: 5

SOLUTION1

```

for i upto n
  for j upto n
    j=n-1
    east+=eastfly[k]
    west+=westfly[k]
    if east!=0 && i>0
      east--
      i--
    else if west!=0 && j>0
      west--
      j--
    if east<west && east <max
      max=east
    else if west <east && west <max
      max=west
    
```

SOLUTION2

```

for(n=0;n<n+1){
  nowl += o[n].x;
  nowr += o[n].y;
  while(nowl>lim){
    if(all==0 || lok==0)
      return false;
    lok--;
    nowl--;
    all--;
  }
  while(nowr>lim){
    if(all==0 || rok==0)
      return false;
    rok--;
    nowr--;
    all--;
  }
  if(lok < nowl)
    lok++;
  if(rok < nowr)
    rok++;
  if(all < (nowl+nowr))
    all++;
  return true;
}
    
```

SOLUTION3

Roads	W	E
1	A1,A2,A3	B1,B2
2		B3,B4,B5
3	A4,A5	
Total	5	5
Take off	3-1=2	

SOLUTION3

	總	總'	W飛	E飛	W	E
3 2	5	4	1	1	3	2
0 3	8	6	2	2	3	5
2 0	10	8	2	2	5	5

總=總數

總'=飛過飛機後的總數

W飛=W在那一回合最多可以飛幾次

E飛=E在那回合最多可以飛幾次(包含前幾回合)

W=累加下來那回合會有幾架飛機(不包含飛的)

E=累加下來那回合會有幾架飛機(不包含飛的)

SOLUTION3

```

AP[0]=0; WAP[0]=0; WFY[0]=!(AP[0]<0){ AP[0]++; }
0; EAP[0]=0; w[0]=0; e[0]=0;if(WAP[0]-WFY[0]>0&&!time-1){ if(WAP[0]-WFY[0]>0
for(int j=0;j<time;j++){
    if(EAP[j]==0&&WAP[j]==0&&j!=time-1){ WAP[j+1]-
cin>>w[j]>>e[j+1]; WAP[j+
1]=WAP[j]+w[j+1]; EAP[j+1]=Min(WAP[j], EAP[j]);
AP[j]+e[j+1]; if(j!=time-
1){ AP[j+1]=AP[j]+w[j+1]+e[j+
1]-1; } else if(j==time-
1){ AP[j+1]=AP[j]+w[j+1]+e[j+
1]; WFY[j+1]=WFY[j]; }
    
```

SOLUTION3

```

for(int k=1;k<time+1;k++){ mean=AP[k];
if(AP[k%2]==0&&w[k]!=0&&k!=time){ max++;
if(WAP[k]<mean){ max=AP[k]-WAP[k];} if(e[k]!=0&&k!=time){ max++; }
} else if(WAP[k]==mean){ if(WAP[k]!=0){ max=mean+AP[k%2]; if(AP[k%2]==1&&e[k]!=0
    
```

SOLUTION3

```

else if(WFY[k]==WAP[k]-mean){ max=mean+AP[k]; if(AP[k%2]==0&&e[k]!=0&&k!=
}
if(Min==0) cout<<Min<<endl; else if(M
else if(WFY[k]<WAP[k]-mean){ max=WAP[k]-WFY[k]; if(WAP[k]==0&&k!=time-1)
    
```

COMPARE

SOLUTION1	SOLUTION2	SOLUTION3
$O(\log^2 n)$	$O(n \log_2 n)$	$O(n)$

勝