```c
#include<stdio.h>
int a=0;
void addtakeoff();
void addlanding();
void landing();
int l[3],c,f1=-1,f2=-1,r1=-1,r2=-1;
int t[3],count=0,count1=0;
main()
{

    if(f1==r1 && f2==r2){
        printf("Menu:\n1 to add takeoff\n2 to add a landing\n");
        scanf("%d",&a);
        if(a==1)
            addtakeoff();
        else
            addlanding();
    }
    else if(f1==r1 && f2!=r2){
        printf("Menu:\n1 to add takeoff\n2 to add a landing\n3 to land a plane\n");
        scanf("%d",&a);
        switch(a){
        case 1 : addtakeoff();break;
        case 2 : addlanding();break;
        case 3 : landing();break;
        }
    }
    else if(f2==r2 && f1!=r1){
        printf("Menu:\n1 to add takeoff\n2 to add a landing\n3 to takeoff a plane\n");
        scanf("%d",&a);
        switch(a){
        case 1 : addtakeoff();break;
        case 2 : addlanding();break;
        case 3 : takeoff();break;
        }
    }
    else {
        printf("Menu:\n1 to add takeoff\n2 to add a landing\n3 to takeoff a plane\n4 to land a plane\n");
        scanf("%d",&a);
        switch(a){
```

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41              case 1 : addtakeoff();break;
42              case 2 : addlanding();break;
43              case 3 : takeoff();break;
44              case 4 : landing();break;
45              }
46          }
47          }
48          void addtakeoff(){
49              if(r1==2){
50                      printf("Takeoff runway is
    full\n");}
51              else{
52            printf("\n Enter plane ID\n");
53            r1=r1+1;
54            scanf("%d",&t[r1]);
55              }
56              main();
57
58          }
59          void addlanding(){
60           if(r2==2){
61                      printf("Landing runway is
    full\n");}
62              else{
63            printf("\n Enter plane ID\n");
64            r2=r2+1;
65            scanf("%d",&l[r2]);}
66            main();
67          }
68          void takeoff(){
69              int i;
70
71              if(r1>=1&&r2<=0&&count==0)
72          {
73          count++;
74          printf("%d has takeoff\n",t[0]);
75              for(i=0;i<=r1;i++)
76              {
77                  t[i]=t[i+1];
78              }
79              r1--;
80              takeoff();
81
82          }
83
```

```
84              printf("%d has takeoff\n",t[0]);
85              for(i=0;i<=r1;i++)
86              {
87                  t[i]=t[i+1];
88              }
89              r1--;
90              main();
91          }
92          void landing(){
93              int i;
94              if(r2>=1&&r1<=0&&count1==0)
95              {
96                  count1++;
97                  printf("%d has landed\n",l[0]);
98                  for(i=0;i<=r2;i++)
99                 {
100                 l[i]=l[i+1];
101                }
102             r2--;
103             landing();
104             }
105             printf("%d has landed\n",l[0]);
106             for(i=0;i<=r2;i++)
107             {
108                 l[i]=l[i+1];
109             }
110             r2--;
111             main();
112         }
113
114
```