```
#include<stdio.h>
int pid[4]={1,2,3,4};
int a[4]={1,2,1,4};
int b[4]={3,4,2,4};
int sts[4]={0,0,0,0};
int ct[4];
int count=4;
int jtime;

void sjf()
{
    int index=-1;
    int value=1000;

    for(int i=0;i<4;i++)
    {
        if(a[i]<=jtime&&sts[i]!=1)
        {
            if(b[i]<value)
            {
                value=b[i];
                index=i;
            }
        }
    }
    //index found
    printf("index found : %d\n",index);

    if(index!=-1)
    {
        ct[index]=jtime+b[index];
        jtime=ct[index];
        sts[index]=1;
        count--;
    }
}


int main()
{
    //sorting according to arrival time
    int temp;
    for(int i=0;i<4;i++)
    {
        for(int j=0;j<4-i-1;j++)
        {
            if(a[j]>a[j+1])
            {
                temp=a[j];
                a[j]=a[j+1];
                a[j+1]=temp;

                temp=b[j];
                b[j]=b[j+1];
```

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                b[j+1]=temp;

                temp=pid[j];
                pid[j]=pid[j+1];
                pid[j+1]=temp;


            }

        }

    }

    jtime=a[0];




    //calculating the completion time

    while(count!=0)
    {
        printf("jtime : %d\n",jtime);

        sjf();

    }



    //Printing the results

    printf("Process     Arrival time        Burst time      completion time
\n");

    for(int i=0;i<4;i++)
    {
        printf("   %d            %d                %d
%d\n",pid[i],a[i],b[i],ct[i]);

    }

}
```