```
FCFS:-
                                                        for(i=0;i<n;i++)
#include<stdio.h>
                                                         scanf("%d",&RQ[i]);
#include<stdlib.h>
                                                        printf("Enter initial head position\n");
                                                        scanf("%d",&initial);
int main()
int RQ[100],i,n,TotalHeadMoment=0,initial;
                                                        // logic for sstf disk scheduling
    printf("Enter the number of Requests\n");
    scanf("%d",&n);
                                                            /* loop will execute until all process is
    printf("Enter the Requests sequence\n");
                                                    completed*/
    for(i=0;i<n;i++)</pre>
                                                        while(count!=n)
     scanf("%d",&RQ[i]);
    printf("Enter initial head position\n");
                                                            int min=1000,d,index;
    scanf("%d",&initial);
                                                            for(i=0;i<n;i++)
                                                            {
    // logic for FCFS disk scheduling
                                                               d=abs(RQ[i]-initial);
                                                               if(min>d)
    for(i=0;i<n;i++)
                                                               {
                                                                    min=d;
                                                                    index=i;
TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
                                                               }
initial);
        initial=RQ[i];
                                                            TotalHeadMoment=TotalHeadMoment+min;
    }
                                                            initial=RO[index];
    printf("Total head moment is
                                                            // 1000 is for max
%d", TotalHeadMoment);
                                                            // you can use any number
    return 0;
                                                            RQ[index]=1000;
                                                            count++;
}
                                                        }
                                                        printf("Total head movement is
OUTPUT:
                                                    %d",TotalHeadMoment);
                                                        return 0;
Enter the number of Request
                                                    }
Enter the Requests Sequence
                                                    OUTPUT:
95 180 34 119 11 123 62 64
Enter initial head position
                                                    Enter the number of Request
Total head movement is 644
                                                    Enter Request Sequence
                                                    95 180 34 119 11 123 62 64
                                                    Enter initial head Position
SSTF:-
                                                    50
                                                    Total head movement is 236
#include<stdio.h>
#include<stdlib.h>
int main()
                                                    SCAN:
   int
                                                    #include<stdio.h>
RQ[100],i,n,TotalHeadMoment=0,initial,count=0;
                                                    #include<stdlib.h>
    printf("Enter the number of Requests\n");
                                                    int main()
    scanf("%d",&n);
                                                    {
    printf("Enter the Requests sequence\n");
```

```
int
                                                                 initial=RO[i];
RO[100],i,j,n,TotalHeadMoment=0,initial,size,move
                                                             }
                                                             // last movement for max size
    printf("Enter the number of Requests\n");
                                                             TotalHeadMoment=TotalHeadMoment+abs(size-
    scanf("%d",&n);
                                                    RQ[i-1]-1);
    printf("Enter the Requests sequence\n");
                                                             initial = size-1;
    for(i=0;i<n;i++)
                                                             for(i=index-1;i>=0;i--)
     scanf("%d",&RQ[i]);
    printf("Enter initial head position\n");
    scanf("%d",&initial);
                                                    TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
    printf("Enter total disk size\n");
                                                    initial);
    scanf("%d",&size);
                                                                  initial=RQ[i];
    printf("Enter the head movement direction for
high 1 and for low 0\n");
                                                             }
    scanf("%d",&move);
                                                        // if movement is towards low value
    // logic for Scan disk scheduling
                                                        else
                                                        {
        /*logic for sort the request array */
                                                             for(i=index-1;i>=0;i--)
    for(i=0;i<n;i++)
                                                    TotalHeadMoment=TotalHeadMoment+abs(RO[i]-
        for(j=0;j<n-i-1;j++)
                                                    initial);
            if(RQ[j]>RQ[j+1])
                                                                 initial=RO[i];
                int temp;
                                                             // last movement for min size
                temp=RQ[j];
                RQ[j]=RQ[j+1];
                                                    TotalHeadMoment=TotalHeadMoment+abs(RQ[i+1]-0);
                RQ[j+1]=temp;
                                                             initial =0;
            }
                                                             for(i=index;i<n;i++)</pre>
                                                             {
        }
    }
                                                    TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
                                                    initial);
    int index;
                                                                  initial=RQ[i];
    for(i=0;i<n;i++)
                                                             }
                                                         }
        if(initial<RQ[i])</pre>
            index=i;
                                                        printf("Total head movement is
            break;
                                                    %d", TotalHeadMoment);
                                                        return 0;
        }
    }
                                                    }
    // if movement is towards high value
                                                    OUTPUT:
    if(move==1)
    {
                                                    Enter the number of Request
        for(i=index;i<n;i++)</pre>
                                                    Enter the Requests Sequence
                                                    95 180 34 119 11 123 62 64
TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
                                                    Enter initial head position
initial);
                                                    50
```

```
Enter total disk size
                                                                 index=i;
                                                                 break:
200
Enter the head movement direction for high 1 and
                                                             }
for low 0
                                                         }
Total head movement is 337
                                                        // if movement is towards high value
                                                        if(move==1)
CSCAN:-
                                                             for(i=index;i<n;i++)</pre>
#include<stdio.h>
#include<stdlib.h>
                                                     TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
int main()
                                                     initial);
{
                                                                 initial=RQ[i];
    int
RQ[100],i,j,n,TotalHeadMoment=0,initial,size,move
                                                             // last movement for max size
                                                             TotalHeadMoment=TotalHeadMoment+abs(size-
    printf("Enter the number of Requests\n");
                                                     RO[i-1]-1);
    scanf("%d",&n);
                                                             /*movement max to min disk */
    printf("Enter the Requests sequence\n");
                                                             TotalHeadMoment=TotalHeadMoment+abs(size-
    for(i=0;i<n;i++)
                                                     1-0);
     scanf("%d",&RQ[i]);
                                                             initial=0;
    printf("Enter initial head position\n");
                                                             for( i=0;i<index;i++)</pre>
    scanf("%d",&initial);
                                                             {
    printf("Enter total disk size\n");
    scanf("%d",&size);
                                                     TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
    printf("Enter the head movement direction for
                                                    initial);
high 1 and for low 0\n");
                                                                  initial=RQ[i];
    scanf("%d",&move);
                                                             }
    // logic for C-Scan disk scheduling
                                                         }
                                                         // if movement is towards low value
        /*logic for sort the request array */
                                                        else
    for(i=0;i<n;i++)
                                                        {
                                                             for(i=index-1;i>=0;i--)
        for( j=0; j<n-i-1; j++)
            if(RQ[j]>RQ[j+1])
                                                     TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
                                                     initial);
                int temp;
                                                                 initial=RQ[i];
                temp=RQ[j];
                RQ[j]=RQ[j+1];
                                                                last movement for min size
                                                             //
                RQ[j+1]=temp;
            }
                                                     TotalHeadMoment=TotalHeadMoment+abs(RQ[i+1]-0);
                                                             /*movement min to max disk */
        }
                                                             TotalHeadMoment=TotalHeadMoment+abs(size-
    }
                                                     1-0);
                                                             initial =size-1;
    int index;
                                                             for(i=n-1;i>=index;i--)
    for(i=0;i<n;i++)
                                                             {
        if(initial<RQ[i])</pre>
        {
```

```
TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-
initial);
             initial=RQ[i];
        }
    }
    printf("Total head movement is
%d",TotalHeadMoment);
    return 0;
}
OUTPUT:-
Enter the number of Request
Enter the Requests Sequence
95 180 34 119 11 123 62 64
Enter initial head position
Enter total disk size
Enter the head movement direction for high 1 and
for low 0
Total head movement is 382
```