Slip 18

q.1

#include<stdio.h>

#include<stdlib.h>

void main()

{

int f[50],index[50],i,n,st,len,j,c,k,ind,count=0;

for(i=0;i<50;i++)

f[i]=0;

x:printf("Enter the index block:");

scanf("%d",&ind);

if(f[ind]!=1)

{

printf("Enter no of blocks needed and no of files for the index %d on the disk:\n",ind);

scanf("%d",&n);

}

else

{

printf("%d index is already allocated\n",ind);

goto x;

}

y:count=0;

for(i=0;i<n;i++)

{

scanf("%d",&index[i]);

if(f[index[i]]==0)

count++;

}

if(count==n)

{

for(j=0;j<n;j++)

{

f[index[j]]=1;

printf("Allocated\n");

printf("File Indexed\n");

for(k=0;k<n;k++)

printf("%d------>%d:%d\n",ind,index[k],f[index[k]]);

}

}

else

{

printf("File in the index is already allocated\n");

printf("Enter another file indexed");

goto y;

}

printf("Do you want to enter more file(yes-1/no-0)");

scanf("%d",&c);

if(c==1)

goto x;

else

exit(0);

getch();

}

q.2

#include<stdio.h>

#include<stdlib.h>

int main()

{

int RQ[100],i,j,n,TotalHeadMoment=0,initial,size,move;

printf("Enter the number of Requests\n");

scanf("%d",&n);

printf("Enter the Requests sequence\n");

for(i=0;i<n;i++)

scanf("%d",&RQ[i]);

printf("Enter initial head position\n");

scanf("%d",&initial);

printf("Enter total disk size\n");

scanf("%d",&size);

printf("Enter the head movement direction for high 1 and for low 0\n");

scanf("%d",&move);

for(i=0;i<n;i++)

{

for(j=0;j<n-i-1;j++)

{

if(RQ[j]>RQ[j+1])

{

int temp;

temp=RQ[j];

RQ[j]=RQ[j+1];

RQ[j+1]=temp;

}

}

}

int index;

for(i=0;i<n;i++)

{

if(initial<RQ[i])

{

index=i;

break;

}

}

if(move==1)

{

for(i=index;i<n;i++)

{

TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-initial);

initial=RQ[i];

}

// last movement for max size

TotalHeadMoment=TotalHeadMoment+abs(size-RQ[i-1]-1);

initial = size-1;

for(i=index-1;i>=0;i--)

{

TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-initial);

initial=RQ[i];

}

}

else

{

for(i=index-1;i>=0;i--)

{

TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-initial);

initial=RQ[i];

}

TotalHeadMoment=TotalHeadMoment+abs(RQ[i+1]-0);

initial =0;

for(i=index;i<n;i++)

{

TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-initial);

initial=RQ[i];

}

}

printf("Total head movement is %d",TotalHeadMoment);

return 0;

}