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Course => BSc IT Date => 27/08/2021

```
#Include<studio.h>
#Include<conio.h>
#define max 25
    Void main()
  {
   int
   frag[max],b[max],f[max],i,j,nb,nf,temp,hi
       ghost=0;
   Static int bf[max],ff[max];
    clrscr();
Printf("\n\tMemory Management scheme-worst Fit");
Printf("\nEnter the number of blocks:");
  Scanf("%d",&nb);
 Printf("Enter the number of files:");
Scanf("%d",&nf);
Printf("\n Enter the size of the blocks\n");
for(i=1;i<=nb;i++)
{
    Printf("Block %d:",i);
    Scanf("%d",&b[i]);
}
```

```
Printf("Enter the size of the files:\n");
for (i=1; i<=nf; i++)
{
  Printf("file %d:", i);
  Scanf("%d", &f[i]);
}

  for (i=1; i<=nf; i++)
{
  for (j=1; j<=nb; j++)
{
  if(bf[j]!=1) // if bf[j] is not allocated
{
  temp = b[j]-f[i];
  if(temp >=0)
  if (highest<temp)
{
  ff[i]=j;
  highest = temp;
}
}
frag[i]= highest;
  bf[ff[i]]=1;
  highest=0;
}
  ff[i]=j;
  highest = temp;
}
```

```
printf("\nFile_no:\tFile-Size:\t Block-no:\t Block-s
    :\t fragement");
for(i=1; i<=nf; i++)
printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d",i,
        f[i], ff[i], b[ff[i]], frag[i]);
  getch();
}
```

Q2

```
#include <stdio.h>
int main()
{
  int queue[20], n, head, i, j, k, seek=0, max, diff
  temp, queue1[20], queue2[20], temp1=0
  float avg;
  Printf("Enter the max range of disk\n");
  Scanf("%d", &head);
  Printf("Enter the initial head position\n");
  Scanf("%d", &head);
  Printf("Enter the size of queue request\n");
  Scanf("Enter the queue of disk positions to be
  Scanf("%d", &n);
  Printf("Enter the size of queue request\n");
  Scanf("%d"
    for(i=1; i<n; i++)
  {
    Scanf("%d", &temp);
    if(temp>=head)
    {
        queue1[temp1]=temp;
        temp1++;
    }
```

```
else
{
    queue2[temp2]=temp;
    temp2++;
}
}

for(i=0;i<temp1-1;i++)
{
    for(j=i+1;j<temp1;j++)
    {
        if queue1[i]>queue1[j])
        {
            temp=queue1[i];
            queue1[i]=queue1[j];
            queue1[j]=temp;
        }
    }
}
for(i=1,j=0;j<temp1;i++,j++)
queue[i]=queue1[j];
queue[j]=max;
queue[i+1]=0
for(i=temp1+3,j=0;j<temp2;i++,j++)
queue[i]=queue2[j];
queue[0]=head;
```

```
for (j=0; j<=n+1; j++)
{
    diff=abs(queue[j+1]-queue[j]);
    seek+=diff;
    Printf("Disk head moves from %d
    to %d with seek.
    %d\n", queue[j], queue[j+1], diff);
}
Printf("Total seek time is %d\n", seek);
avg=seek/(float)n;
Printf("Average seek time is %f\n", avg);
return 0;
```