Graphic Era Hill University Dehradun

(Answer Sheet for Online Examination Aug 2021)

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Date 27-8-2021 Course BSC IT Branch Dehradun Sem II Section B

Subyect Name Operating System Subyect Code Page No

Q1 Ans

```
#include <stdio.h>
int main()
{
 Printf("\n\t\t\t Memory
 Managment"" - Worst Fit");
int i, j, nblocks, nfiles, temp, tab = 0;
int frag[10], blocks_arr[10], file_arr[10];
Printf("\n Enter the Total Number "'of Blocks:");
Scanf("%d" & nblocks);
Prin+f("Enter the Total Number" of Files:");
scanf("%d", & nfiles);
Printf("\n Enter the Size of the "Blocks:\n");
for(i=0; i<nblocks; i++)
  {
 Printf("Blck No%.d:\t", i+1);
scanf("%.d", & blocks [i]);
}
Printf("Enter the size of the "'Files:\n");
for (i =0; i<nfiles; i++)
  {
  Printf("Files No. %.d:\t", i+1);
  Scanf("%d", & files [i]);
}
for(i=0;i<nfiles; i++)
{
for (j =0;j<nblocks; j++)
```

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```
{
if (block_arr[j] != 1)
{
temp = blocks[j] - files[i];
if (temp >= 0)
{
if (top < temp)
{
file_arr[i] = j;
top = temp;
}
}
}
frag[i] = top;
block_arr[file_arr[i]] = 1;
top = 0;
}
}
Printf ("\nfiles Number \t file
Size \t" Block Number \t Block
Size \t Fragment ");
for (i=0; i<nfiles; i++)
{
Printf ("\n %d \t\t %d \t\t %d \t\t %d", i, files[i],
file_arr[i], blocks[file_arr[i]], frag[i]);
}
Printf ("\n");
return 0;
}
```

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Btock

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Block No 3 7

Enter the Size of the files:

file No : 1: 1

file No : 2: 4

file Num	file Size	Block Num	BlockSize
0	1	2	7
1	4	6	5

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Subject Name Operating System Subject Code Page No

```
# include <stdio.h>
 int absolute value (int);
 void main () {
  int queue [25], n, headposition i, j, k seek =0 maxrange;
  int difference temp queue [20] queue 2 [20], temp 1 =0 temp 2=0;
  Printf ("Enter the maximum range of disk");
  Scanf ("%d" & Maxrange );
  Printf ("Enter the number of queu request");
  Scan f("%d" & n);
  Printf ("Enter the initial head position:");
  Scan f("%d" & headposition);
  Printf ("Enter the disk positions to be read (queue ):");
  for (i= i; i<n ; i++ ) {
  Scanf ("%d" & temp);
  if (temp > headposition)
   { queue 1 (temp) = temp;
  temp 1++;
  else {
       queue 2 (temp) = temp;
    temp 2++;
  }
  }
  for (i=0;i< temp- i ; i++)
  {
  for (i] =i++ j <temp 1 ; i++ ){
    if queue (i] >queor cy]){
         temp= queue (i];
          queue (i] = queue (i];
```

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```
queue 1 (j]) = temb

for }
  }
  }
for (i= 1, j =0, j < temb ; i++, j++) {
      queue(i) = queue (1];
  }
  queve (i] = maxrange ;
 for (i=temb+2, j=0; j <temb 2; i++, j++){
    queue (i) = queue (j);
        }
   queue (i) =0
   queue (0] = head boxition;
 for (i=0, j< n; j++){
      difference absolotevalue (queue (j++)- queue(i)]);
 Seek =Seek +difference;
  printf("Disk head move from position %d to %d
 with seek %d n" queue (i) queu (j++) difference);
 } printf total seek time = %d/n", Seek
int absutaute (intr)
{
  if (x)0) {
    return
  }
  else
 { return x*-1;
  }
}
```

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(2)

Output

Enter the max range of Disk 50

" " number of queue requests : 7

" " initial head Position : 24

" " Disk Positions to be read : 12 26 29 4 42, 8, 50

Disk head moves from Position 24 to 26 with Seek 2

" " " " 26 to 42 " " 16

" " " " 42 to 50 " " 8

" " " " 50 to 50 " " 0

" " " " 50 to 24 " " 26

" " " " 24 to 12 " " 12

" " " " 12 to 8 " " 4

" " " " 8 to 4 " " 4

total Seek Time = 72

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