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### OSEXPERIMENT-11

```
#include
<stdio.h>#include
<conio.h>#include<stdl
ib.h>voidrecurse(intfile
s[]){
intflag=0,startBlock, len,j, k,ch;
printf("Enter the starting block and the length of the files:
");scanf("%d%d",&startBlock, &len);
for (j=startBlock; j<(startBlock+len);
j++){ if(files[j] ==0)
flag++;
}
if(len==flag){
for (int k=startBlock; k<(startBlock+len);
k++){ if(files[k] == 0){
files[k]=1;printf("%d\t%d\n",k
,files[k]);
}
}
if(k!=(startBlock+len-1))
printf("Thefileisallocatedtothedisk\n");
}
else
printf("The file is not allocated to the
disk\n");printf("Do you want to enter more
files?\n");printf("Press 1 for YES, 0 for NO:
");scanf("%d",&ch);
if (ch ==
1)recurse(file
s);else
exit(0);
return;
}
intmain()
{
intfiles[50];
for(int
i=0;i<50;i++)files[i]
=0;
printf("Files Allocated are
:\n");recurse(files);
getch();ret
urn0;
}
```

OUTPUT:-

```
Activities Terminal Tue 09:35
apsit@apsit-HP-280-G3-MT: ~
File Edit View Search Terminal Help
apsit@apsit-HP-280-G3-MT:~$ gcc -o exp10 exp10.c
apsit@apsit-HP-280-G3-MT:~$ ./exp10
Files Allocated are :
Enter the starting block and the length of the files: 15 30
15 1
16 1
17 1
18 1
19 1
20 1
21 1
22 1
23 1
24 1
25 1
26 1
27 1
28 1
29 1
30 1
31 1
32 1
33 1
34 1
35 1
36 1
37 1
38 1
39 1
40 1
41 1
42 1
43 1
44 1
The file is allocated to the disk
Do you want to enter more files?
Press 1 for YES, 0 for NO: 0
apsit@apsit-HP-280-G3-MT:~$ ./exp10
Files Allocated are :
Enter the starting block and the length of the files: 10 5
10 1
11 1
12 1
13 1
14 1
The file is allocated to the disk
```

```
Activities Terminal Tue 09:35
apsit@apsit-HP-280-G3-MT: ~
File Edit View Search Terminal Help
24 1
25 1
26 1
27 1
28 1
29 1
30 1
31 1
32 1
33 1
34 1
35 1
36 1
37 1
38 1
39 1
40 1
41 1
42 1
43 1
44 1
The file is allocated to the disk
Do you want to enter more files?
Press 1 for YES, 0 for NO: 0
apsit@apsit-HP-280-G3-MT:~$ ./exp10
Files Allocated are :
Enter the starting block and the length of the files: 10 5
10 1
11 1
12 1
13 1
14 1
The file is allocated to the disk
Do you want to enter more files?
Press 1 for YES, 0 for NO: 1
Enter the starting block and the length of the files: 15 5
15 1
16 1
17 1
18 1
19 1
The file is allocated to the disk
Do you want to enter more files?
Press 1 for YES, 0 for NO: 0
apsit@apsit-HP-280-G3-MT:~$
```

## PROGRAM:-

```
#include
<stdio.h>#include
<conio.h>#include
<stdlib.h>
int files[50], indexBlock[50], indBlock,
n;voidrecurse1();
void
recurse2();voidr
ecurse1(){
printf("Enter the index block:
");scanf("%d",&indBlock);
if(files[indBlock]!=1){
printf("Enter the number of blocks and the number of files
```

```

needed for the index %d on the disk: ",
indBlock);scanf("%d",&n);
}
else{
printf("%d is already allocated\n",
indBlock);recurse1();
}
recurse2();
}
void
recurse2(){intch
;
intflag = 0;
for (int i=0; i<n;
i++){ scanf("%d",
&indexBlock[i]);if
(files[indexBlock[i]] ==
0)flag++;
}
if(flag ==n){
for (int j=0; j<n;
j++){ files[indexBlock[j]
]=1;
}
printf("Allocated\n");pri
ntf("File
Indexed\n");for(intk=0;
k<n;k++){
printf("%d ----->%d:%d\n",indBlock, indexBlock[k],
files[indexBlock[k]]);
}
}
else{
printf("File in the index is already
allocated\n");printf("Enter another indexed
file\n");recurse2();
}
printf("Do you want to enter more
files?\n");printf("Enter 1 for Yes, Enter 0 for
No: ");scanf("%d",&ch);
if (ch ==
1)recurse1(
);elseexit(0
);return;
}
intmain()
{
for(int
i=0;i<50;i++)files[i]
=0;recurse1();
return0;
}OUTPUT

```

:-

[illegible]