S.No: 7	Exp. Name: ***Implement file storage allocation technique: Contiguous (using array).***	Date:2025-04-09

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Aim:

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Description: A file is a collection of data, usually stored on disk. As a logical entity, a file enables to divide data into meaningful groups. As a physical entity, a file should be considered in terms of its organization. The term "file organization" refers to the way in which data is stored in a file and, consequently, the method(s) by which it can be accessed.

Source Code:

Contiguous.c

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int f[50],i,st,len,j,c,k,count=0;
   for(i=0;i<50;i++)
      f[i]=0;
   printf("Files Allocated are : \n");
   x: count=0;
   printf("Enter starting block and length of files: ");
   scanf("%d%d",&st,&len);
   for(k=st;k<(st+len);k++)
      if(f[k]==0)
         count++;
   if(len == count)
   {
      for(j=st;j<(st+len);j++)
         if(f[j]==0)
         {
            f[j]=1;
            printf("%d\t%d\n",j,f[j]);
         }
      if(j!=(st+len-1))
         printf("The file is allocated to disk\n");
   }
   else
      printf("The file is not allocated \n");
   printf("Do you want to enter more file(Yes - 1/No - 0)");
   scanf("%d",&c);
   if(c==1)
      goto x;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Files Allocated are : 20 5

Enter starting block and length of files: 20 5
20 1 1
21 1 1
22 1 1
23 1 1
24 1 1
The file is allocated to disk 1
Do you want to enter more file(Yes - 1/No - 0) 1
Enter starting block and length of files: 23 4
The file is not allocated 0
Do you want to enter more file(Yes - 1/No - 0) 0