PROGRAM 9

9. Develop a C program to simulate the Linked file allocation strategies

DESCRIPTION:

In the chained method file allocation table contains a field which points to starting block of memory. From it for each bloc a pointer is kept to next successive block. Hence, there is no external fragmentation

PROGRAM:

```
#include<stdio.h>
//#include<conio.h>
#include<stdlib.h>
void main()
{
int f[50], p,i, st, len, j, c, k, a;
//clrscr();
for(i=0;i<50;i++)
f[i]=0;
printf("Enter how many blocks already allocated: ");
scanf("%d",&p);
printf("Enter blocks already allocated: ");
for(i=0;i<p;i++)
{
scanf("%d",&a);
f[a]=1;
}
x: printf("Enter index starting block and length: ");
scanf("%d%d", &st,&len);
k=len;
if(f[st]==0)
{
for(j=st;j<(st+k);j++)
{
if(f[j]==0)
{
f[j]=1;
printf("%d-------->%d\n",j,f[j]);
}
else
{
printf("%d Block is already allocated \n",j);
k++;
}
}
}
else
```

```
printf("%d starting block is already allocated \n",st);
printf("Do you want to enter more file(Yes - 1/No - 0)");
scanf("%d", &c);
if(c==1)
goto x;
else
exit(0);
//getch();
}
```

OUTPUT

```
Enter how many blocks already allocated: 6
Enter blocks already allocated: 5
8
2
4
9
12
Enter index starting block and length: 3
8
3-------->1
4 Block is already allocated
5 Block is already allocated
6-------->1
7-------->1
8 Block is already allocated
9 Block is already allocated
10-------->1
11-------->1
12 Block is already allocated
13-------->1
14-------->1
15-------->1
Do you want to enter more file(Yes - 1/No - 0)1
Enter index starting block and length: 6
4
6 starting block is already allocated
Do you want to enter more file(Yes - 1/No - 0) 0
```