Ex: No: 10 **Implementation of Paging Technique**

Date :

Aim:

To write a C program to implement paging technique.

Algorithm:

1. Start the program.
2. Get the number of pages in the process.
3. Get the size of the pages.
4. Get the page table values in frame numbers.
5. Insert the pages into the memory using the formula Z=l[i/m]*m+(i/m)
6. Display the memory allocation
7. Stop the program.

Program:

```
#include<stdio.h>
//#include<conio.h>
#include<string.h>
void main(void)
{ int i,m,n,k,z,l[30];
char data[25][10],mem[50][10];
//clrscr();
for(i=0;i<50;i++) strcpy(mem[i]," ");
printf("Enter the number of pages:");
scanf("%d",&n); printf("\nEnter the page size:");
scanf("%d",&m);
k=m*n;
printf("\nEnter the %d number of data:\n",k);
for(i=0;i<k;i++)
scanf("%s",data[i]);
printf("Enter the %d page table values:\n",n);
for(i=0;i<n;i++)
```

```
scanf("%d",&l[i]);
for(i=0;i<k;i++)
{ z=l[i/m]*m+(i%m);
strcpy(mem[z],data[i]);
}
printf("\t Memory allocation\n");
for(i=0;i<30;i++)
printf("\t%d\t\t%s\n",i,mem[i]);
//getch();
}
```

Output:

```
Enter the number of pages:3

Enter the page size:3

Enter the 9 number of data:
a
b
c
d
e
f
g
h
i
Enter the 3 page table values:
1
2
3
     Memory allocation
    0
    1
    2
    3       a
    4       b
    5       c
    6       d
    7       e
    8       f
    9       g
    10      h
    11      i
    12
    13
    14
    15
    16
```

```
Enter the number of pages:3

Enter the page size:3

Enter the 9 number of data:
a
b
c
d
e
f
g
h
i
Enter the 3 page table values:
0
2
4
     Memory allocation
    0       a
    1       b
    2       c
    3
    4
    5
    6       d
    7       e
    8       f
    9
    10
    11
    12      g
    13      h
    14      i
    15
    16
```

Result: