EXERCISE 9

PROG (1) AIM: -Write a c program to implement a hash table with collision resolution techniques.

SOURCE CODE:-

```
#include<stdio.h>
#include<conio.h>
int a[10],size;
int hashfunction(int e)
{
        int key;
        key=e%size;
        if(a[key]==0)
                return key;
        else
                if(size==key)
                {
                        printf("hash table is FULL");
                        return -1;
                }
                else
                hashfunction(e+1);
        return 0;
}
void main()
{
        int i,j,element;
        clrscr();
        printf("enter size of hash table");
        scanf("%d",&size);
        for(i=0; i<size; i++)
                a[i]=0;
        for(i=0; i<size; i++)
        {
                printf("enter element to insert");
```

```
            scanf("%d",&element);
            j=hashfunction(element);
            a[j]=element;
        }
        printf("values in hash Table are\n");
        for(i=0; i<size; i++)
            printf("%d\n",a[i]);
        getch();
}
```

OUTPUT:-

```
enter size of hash table5
enter element to insert6
enter element to insert5
enter element to insert7
enter element to insert8
enter element to insert9
values in hash Table are
5
6
7
8
9
```