```c
//Created By Ritwik Chandra Pandey
//On 4th Nov
//Collision Resolution Techniques: Quadratic Probing

#include <stdio.h>
#include <stdlib.h>
#define SIZE 13

int HashTable[SIZE];
int hash(int x) {
        return x % SIZE;
}
void insert(int x) {
        int i, index, start;
        i=1;
        index = hash(x);
        start = index;
        while(HashTable[index]!=-1){
                if(HashTable[index]==-1){
                        break;
                }
                index = (start+i*i)%SIZE;
                i++;
                if(index==start){
                        printf("Hash table is full.\n");
                        return;
                }
        }
        HashTable[index] = x;
        printf("Successfully inserted.\n");

}
void delete(int x) {
        int i, index, start;
        i=1;
        index = hash(x);
        start = index;
        while(HashTable[index]!=x){
                if(HashTable[index]==x){
                        break;
```

```c
		}
		index = (start+ i*1)%SIZE;
		i++;
		if(index==start){
			printf("Element not found. So cannot delete the element.\n");
			return;
		}
	}
	HashTable[index] = -1;
	printf("Successfully deleted.\n");
}
void search(int x) {
	int i,index,start;
	i =1;
	index = hash(x);
	start= index;
	while(HashTable[index]!=x){
		if(HashTable[index]==x){
			break;
		}
		index = (start+i*1)%SIZE;
		i++;
		if(index==start){
			printf("ELement not found.\n");
			return;
		}
	}
	printf("Element found.\n");
}
void print() {
	int i;
	for(i=0;i<SIZE;i++){
		if(HashTable[i]!=-1){
			printf("[%d]=>%d ",i,HashTable[i]);
		}
	}
	printf("\n");
}
```

```c
int main() {
    int x, op, i = 0;
    for (i = 0; i < SIZE; i++)
        HashTable[i] = -1;
    while (1) {
        printf("1.Insert 2.Delete 3.Search 4.Print 5.Exit\n");
        printf("Enter your option : ");
        scanf("%d", &op);
        switch (op) {
            case 1:printf("Enter an element to be inserted : ");
                    scanf("%d", &x);
                    insert(x);
                    break;
            case 2:
                    printf("Enter an element to be deleted : ");
                    scanf("%d", &x);
                    delete(x);
                    break;
            case 3:
                    printf("Enter an element to be searched : ");
                    scanf("%d", &x);
                    search(x);
                    break;
            case 4:
                    print();
                    break;
            case 5:exit(0);
        }
    }
}
```