

Linear Probing

```
#include <stdio.h>
#define SIZE 10

int hash(int key)
{
    return key%SIZE;
}

int probe(int H[],int key)
{
    int index=hash(key);
    int i=0;
    while(H[(index+i)%SIZE]!=0)
        i++;
    return (index+i)%SIZE;
}

void Insert(int H[],int key)
{
    int index=hash(key);

    if(H[index]!=0)
        index=probe(H,key);
    H[index]=key;
}

int Search(int H[],int key)
{
    int index=hash(key);

    int i=0;

    while(H[(index+i)%SIZE]!=key)
        i++;

    return (index+i)%SIZE;
}

int main()
{
    int HT[10]={0};

    Insert(HT,12);
```

```
    Insert(HT,25);  
    Insert(HT,35);  
    Insert(HT,26);  
  
    printf("\nKey found at %d\n",Search(HT,35));  
    return 0;  
}
```