**Assignment 1:**

import java.util.Arrays;

import java.util.Scanner;

public class Hashing {

int size;

String a[];

Hashing(int n){

size=n;

a= new String[size];

Arrays.fill(a, null);

}

public void insert(String key){

int n = 0;

int i=hash(key);

boolean found=false;

while(a[i]!= null && found==false)

{

if(a[i]==key){

found=true;

}

else{

i=(i+1)%size;

}

}

//System.out.println(key+" :"+i);

if(found==false){

if(n==size)

System.out.println("Overflow");

else

{

a[i]=key;

n=n+1;

}

}

}

public void search(String key){

int i=hash(key);

int n=i;

boolean found=false;

while(a[i]!= null && found==false)

{

if(a[i]==key){

found=true;

System.out.println("Found");

}

else {

i=(i+1)%size;

}

}

if(found==false){

System.out.println("Not Found");

}

}

/\*

public int hash(int key){

return key%size;

}

\*/

public int hash(String key){

int temp=key.hashCode();

return temp% size;

}

public static void main(String args[]){

Scanner sc= new Scanner(System.in);

System.out.println("How many words: ");

int n=sc.nextInt();

Hashing h= new Hashing(n);

for(int i=0; i<h.size; i++)

h.insert(sc.next());

System.out.println("Words aftre hashing: ");

for(int i=0; i<n; i++)

System.out.print(h.a[i]+" ");

System.out.println("\nEnter a word to search for: ");

String word=sc.next();

h.search(word);

}

}