

60-254 Data Structures using Java
Lab 9

(10 marks)

A set of 46 Java reserved words is given to you :

{ abstract, boolean, break, byte, case, catch, char, class, const, continue, default, do, double, else, extends, final, finally, float, for, goto, if, implements, import, instanceof, int, interface, long, native, new, package, private, protected, public, return, short, static, super, switch, synchronized, this, throws, transient, try, void, volatile, while }

Write a method in Java to insert the above words into a hash table(of size 97) using the hash function given below. Also, write a method to search for a word from the hash table and print it. Use the method of Quadratic probing for both insertion and search.

```
public static int hash(String key, int tableSize){  
  
    int hashval = 0;  
  
    //precondition the words(String) into a number.  
    for (int i=0;i< key.length(); i++)  
        hashval = hashval + key.charAt(i);  
  
    return (hashVal % tableSize);  
  
}
```