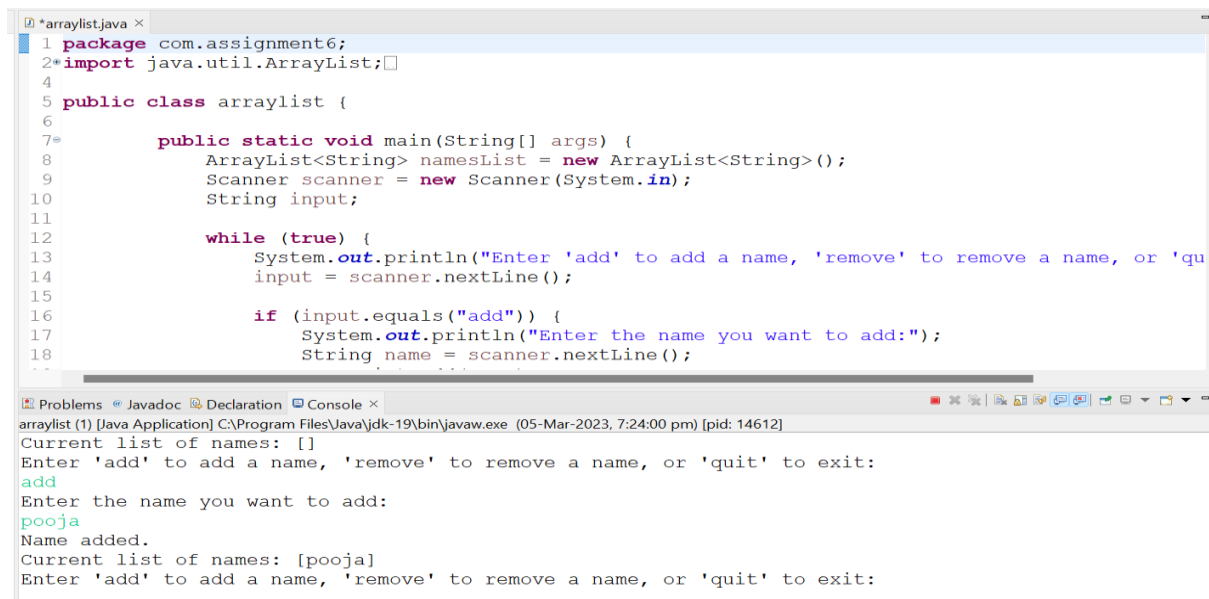


ASSIGNMENT-6

1. Create a program that uses an Array List to store a list of names. The program should allow the user to add and remove names from the list, and should display the current list of names after each modification.

<https://codeshare.io/6pke6N>

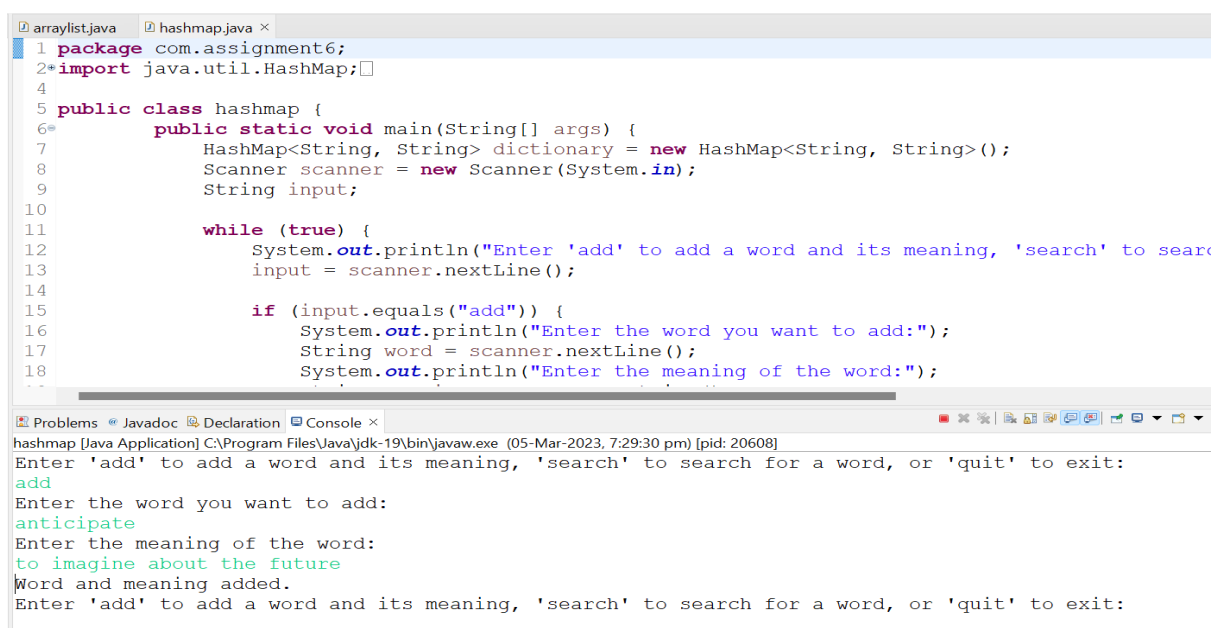


```
1 package com.assignment6;
2 import java.util.ArrayList;
3
4
5 public class arraylist {
6
7     public static void main(String[] args) {
8         ArrayList<String> namesList = new ArrayList<String>();
9         Scanner scanner = new Scanner(System.in);
10        String input;
11
12        while (true) {
13            System.out.println("Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:");
14            input = scanner.nextLine();
15
16            if (input.equals("add")) {
17                System.out.println("Enter the name you want to add:");
18                String name = scanner.nextLine();
19                namesList.add(name);
20                System.out.println("Name added.");
21                System.out.println("Current list of names: " + namesList);
22            }
23        }
24    }
25 }
```

arraylist (1) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (05-Mar-2023, 7:24:00 pm) [pid: 14612]
Current list of names: []
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
add
Enter the name you want to add:
pooja
Name added.
Current list of names: [pooja]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:

2. Create a program that uses a HashMap to store a dictionary of words and their meanings. The program should allow the user to add new words and meanings, and should display the meaning of a word when the user enters the word.

<https://codeshare.io/6pke6N>

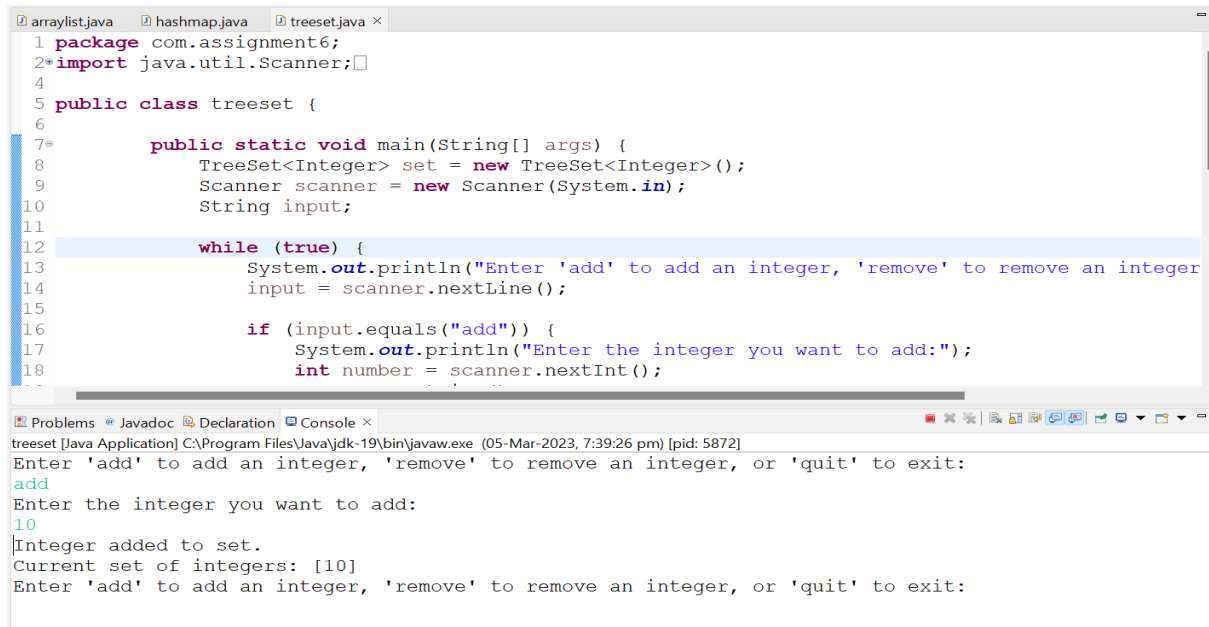


```
1 package com.assignment6;
2 import java.util.HashMap;
3
4
5 public class hashmap {
6
7     public static void main(String[] args) {
8         HashMap<String, String> dictionary = new HashMap<String, String>();
9         Scanner scanner = new Scanner(System.in);
10        String input;
11
12        while (true) {
13            System.out.println("Enter 'add' to add a word and its meaning, 'search' to search for a word, or 'quit' to exit:");
14            input = scanner.nextLine();
15
16            if (input.equals("add")) {
17                System.out.println("Enter the word you want to add:");
18                String word = scanner.nextLine();
19                System.out.println("Enter the meaning of the word:");
20                String meaning = scanner.nextLine();
21                dictionary.put(word, meaning);
22                System.out.println("Word and meaning added.");
23            }
24        }
25    }
26 }
```

hashmap [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (05-Mar-2023, 7:29:30 pm) [pid: 20608]
Enter 'add' to add a word and its meaning, 'search' to search for a word, or 'quit' to exit:
add
Enter the word you want to add:
anticipate
Enter the meaning of the word:
to imagine about the future
Word and meaning added.
Enter 'add' to add a word and its meaning, 'search' to search for a word, or 'quit' to exit:

3. Create a program that uses a Tree Set to store a list of integers. The program should allow the user to add and remove integers from the set, and should display the current set of integers after each modification.

<https://codeshare.io/6pke6N>



```
1 package com.assignment6;
2 import java.util.Scanner;
3
4
5 public class treeset {
6
7     public static void main(String[] args) {
8         TreeSet<Integer> set = new TreeSet<Integer>();
9         Scanner scanner = new Scanner(System.in);
10        String input;
11
12        while (true) {
13            System.out.println("Enter 'add' to add an integer, 'remove' to remove an integer");
14            input = scanner.nextLine();
15
16            if (input.equals("add")) {
17                System.out.println("Enter the integer you want to add:");
18                int number = scanner.nextInt();
19            }
20        }
21    }
22 }
```

Problems Javadoc Declaration Console

treeset [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (05-Mar-2023, 7:39:26 pm) [pid: 5872]

Enter 'add' to add an integer, 'remove' to remove an integer, or 'quit' to exit:

add

Enter the integer you want to add:

10

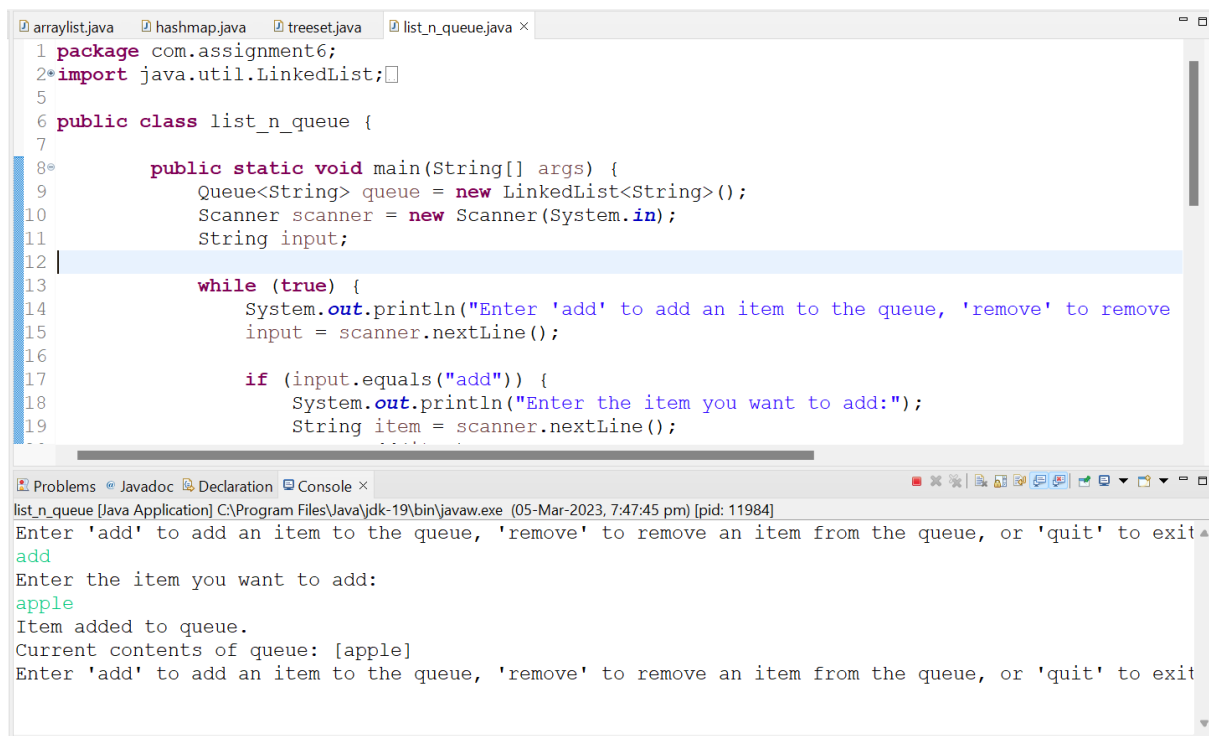
Integer added to set.

Current set of integers: [10]

Enter 'add' to add an integer, 'remove' to remove an integer, or 'quit' to exit:

4. Create a program that uses a LinkedList to implement a queue. The program should allow the user to add and remove items from the queue, and should display the current contents of the queue after each modification

<https://codeshare.io/6pke6N>



```
1 package com.assignment6;
2 import java.util.LinkedList;
3
4
5 public class list_n_queue {
6
7     public static void main(String[] args) {
8         Queue<String> queue = new LinkedList<String>();
9         Scanner scanner = new Scanner(System.in);
10        String input;
11
12        while (true) {
13            System.out.println("Enter 'add' to add an item to the queue, 'remove' to remove");
14            input = scanner.nextLine();
15
16            if (input.equals("add")) {
17                System.out.println("Enter the item you want to add:");
18                String item = scanner.nextLine();
19            }
20        }
21    }
22 }
```

Problems Javadoc Declaration Console

list_n_queue [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (05-Mar-2023, 7:47:45 pm) [pid: 11984]

Enter 'add' to add an item to the queue, 'remove' to remove an item from the queue, or 'quit' to exit:

add

Enter the item you want to add:

apple

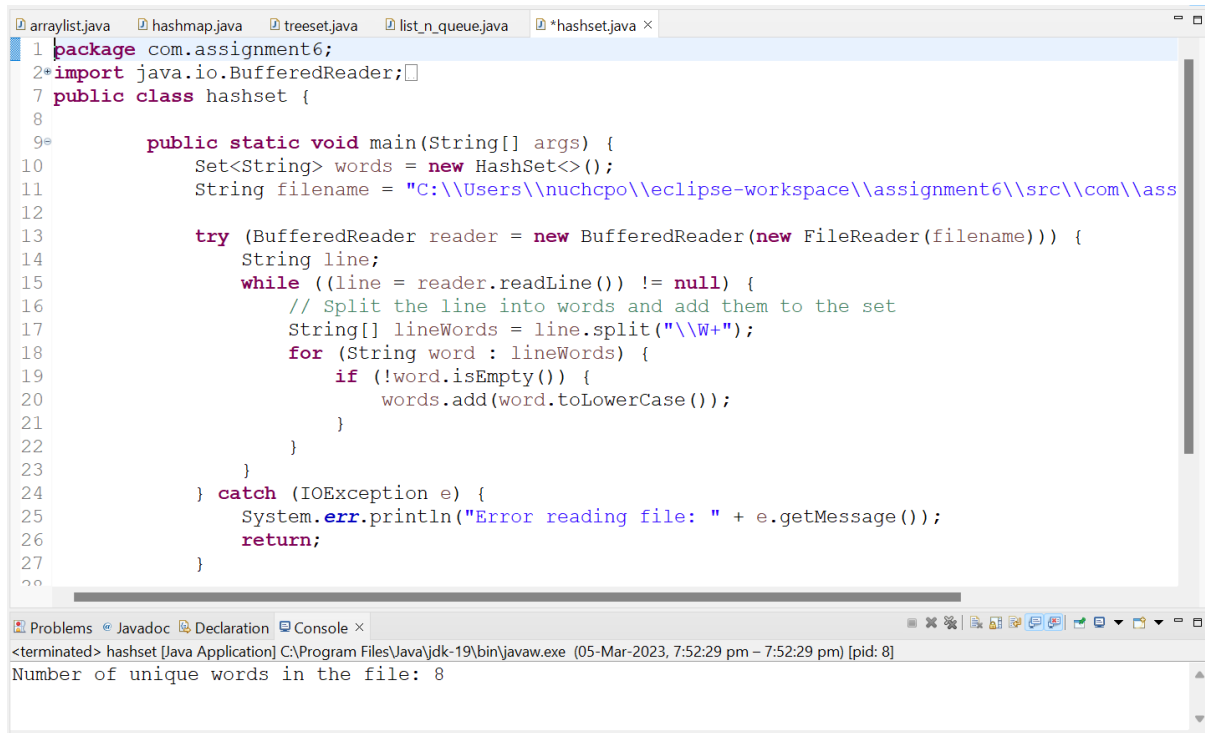
Item added to queue.

Current contents of queue: [apple]

Enter 'add' to add an item to the queue, 'remove' to remove an item from the queue, or 'quit' to exit:

5. Create a program that uses a HashSet to store a set of strings. The program should read in a text file, and should add each word in the file to the set of strings. After all words have been added, the program should display the number of unique words in the file.

<https://codeshare.io/6pke6N>



```
1 package com.assignment6;
2 import java.io.BufferedReader;
3
4 public class hashset {
5
6     public static void main(String[] args) {
7         Set<String> words = new HashSet<>();
8         String filename = "C:\\Users\\nuchcpo\\eclipse-workspace\\assignment6\\src\\com\\ass
9
10        try (BufferedReader reader = new BufferedReader(new FileReader(filename))) {
11            String line;
12            while ((line = reader.readLine()) != null) {
13                // Split the line into words and add them to the set
14                String[] lineWords = line.split("\\W+");
15                for (String word : lineWords) {
16                    if (!word.isEmpty()) {
17                        words.add(word.toLowerCase());
18                    }
19                }
20            }
21        } catch (IOException e) {
22            System.err.println("Error reading file: " + e.getMessage());
23            return;
24        }
25    }
26 }
27
28
```

Problems Javadoc Declaration Console x

<terminated> hashset [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (05-Mar-2023, 7:52:29 pm - 7:52:29 pm) [pid: 8]

Number of unique words in the file: 8