

Assignment-06

1. Create a program that uses an ArrayList 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.

Code <https://codeshare.io/gL9v48>

```
Problems @ Javadoc Declaration Console ×
NameList [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:32:35 pm) [pid: 17996]
Enter an option:
1. Add a name
2. Remove a name
3. Display the list
4. Exit
1
Enter a name to add: mrng
mrng has been added to the list.
Enter an option:
1. Add a name
2. Remove a name
3. Display the list
4. Exit

Helloworld.java Naturalnum.java NameList.java × *Dictionary... IntegerSet.java QueueWithLi... UniqueWords... 28
1 package assignment6;
2
3 import java.util.ArrayList;
4 import java.util.Scanner;
5
6 public class NameList {
7     public static void main(String[] args) {
8         ArrayList<String> names = new ArrayList<>();
9         @SuppressWarnings("resource")
10        Scanner input = new Scanner(System.in);
11
12        while (true) {
13            System.out.println("Enter an option:");
14            System.out.println("1. Add a name");
15            System.out.println("2. Remove a name");
16            System.out.println("3. Display the list");
17            System.out.println("4. Exit");
18
19            int choice = input.nextInt();
20
21            switch (choice) {
22                case 1:
23                    System.out.print("Enter a name to add: ");
24                    String nameToAdd = input.next();
25                    names.add(nameToAdd);
26                    System.out.println(nameToAdd + " has been added to the list.");
27            }
28        }
29    }
30 }
```

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.

Code <https://codeshare.io/X8EoLn>

```
Problems @ Javadoc Declaration Console ×
<terminated> Dictionary [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:51:20 pm – 10:53:21 pm) [pid: 9924]
Enter an option:
1. Add a word and its meaning
2. Look up a word
3. Exit
1
Enter a word: Pleasure
Enter its meaning: Happy
Pleasure has been added to the dictionary.
Enter an option:
1. Add a word and its meaning
2. Look up a word
3. Exit
2
Enter a word to look up: Bright
Bright is not in the dictionary.
Enter an option:
1. Add a word and its meaning
2. Look up a word
3. Exit
3
Exiting program...
```

3. Create a program that uses a TreeSet 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.

Code <https://codeshare.io/9OLxbB>

```
IntegerSet [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:58:57 pm) [pid: 16616]
Enter an option:
1. Add an integer
2. Remove an integer
3. Display the set
4. Exit
1
Enter an integer to add: 21
21 has been added to the set.
Enter an option:
1. Add an integer
2. Remove an integer
3. Display the set
4. 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.

Code <https://codeshare.io/IonJdZ>

```
Problems @ Javadoc Declaration Console ×
QueueWithLinkedList [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 11:03:37 pm) [pid: 15240]
1. Add an element to queue
2. Remove an element from queue
3. Display the queue
4. Exit
Enter your choice: 2
Queue is empty

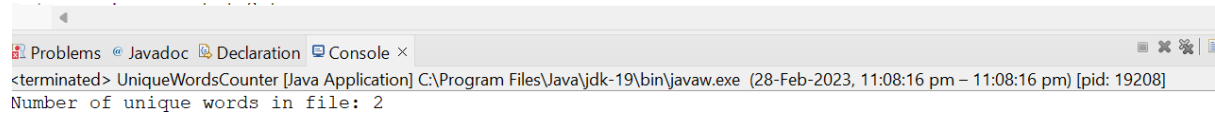
1. Add an element to queue
2. Remove an element from queue
3. Display the queue
4. Exit
Enter your choice: 1
Enter the data to be added: 2

1. Add an element to queue
2. Remove an element from queue
3. Display the queue
4. Exit
Enter your choice: 2
Removed element: 2

1. Add an element to queue
2. Remove an element from queue
3. Display the queue
4. Exit
Enter your choice:
```

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.

Code <https://codeshare.io/78m3Jn>



```
<terminated> UniqueWordsCounter [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 11:08:16 pm - 11:08:16 pm) [pid: 19208]  
Number of unique words in file: 2
```