

Assignment-6

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.

<https://codeshare.io/K8E4DM>

OUTPUT:

```
Problems Declaration Console x
<terminated> NameList [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (03-Mar-2023, 12:35:40 am - 12:37:11 am) [pid: 5648]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
add
Enter a name to add:
Wednesday Addams
Name added. Current list of names: [Wednesday Addams]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
add
Enter a name to add:
Enid
Name added. Current list of names: [Wednesday Addams, Enid]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
add
Enter a name to add:
Goody
Name added. Current list of names: [Wednesday Addams, Enid, Goody]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
add
Enter a name to add:
Xavier
Name added. Current list of names: [Wednesday Addams, Enid, Goody, Xavier]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
add
Enter a name to add:
Tyler
Name added. Current list of names: [Wednesday Addams, Enid, Goody, Xavier, Tyler]
Enter 'add' to add a name, 'remove' to remove a name, or 'quit' to exit:
quit
Exiting program.
```

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/ZJEddQ>

OUTPUT:

```
Problems Declaration Console x
<terminated> Dictionary [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (03-Mar-2023, 12:45:43 am - 12:48:39 am) [pid: 25404]
Enter a word (or q to quit): computer
computer: an electronic device that can store, retrieve, and process data
Enter a word (or q to quit): book
book: a written or printed work consisting of pages glued or sewn together along one side and bound in covers
Enter a word (or q to quit): infrastructure
Word not found. Enter the meaning: physical and organizational structure and facilities.
Enter a word (or q to quit): Lotus
Word not found. Enter the meaning: a flower
Enter a word (or q to quit): q
```

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.

<https://codeshare.io/4eovLj>

OUTPUT:

```
Problems Declaration Console x
<terminated> IntegerSet [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (03-Mar-2023, 12:52:43 am - 12:53:42 am) [pid: 19148]
Enter an integer to add (or q to quit): 7
Set: [7]
Enter an integer to add (or q to quit): 9
Set: [7, 9]
Enter an integer to add (or q to quit): 4
Set: [4, 7, 9]
Enter an integer to add (or q to quit): d
Invalid input.
Enter an integer to add (or q to quit): q
Enter an integer to remove (or q to quit): 9
Set: [4, 7]
Enter an integer to remove (or q to quit): 12
Integer not found in set.
Enter an integer to remove (or q to quit): d
Invalid input.
Enter an integer to remove (or q to quit): q
```

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/PdEJqw>

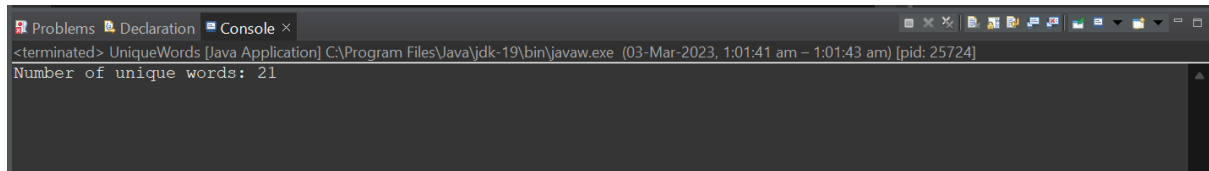
OUTPUT:

```
Problems Declaration Console x
<terminated> Queue [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (03-Mar-2023, 12:56:24 am - 12:57:52 am) [pid: 18500]
Queue: []
Enter an item to add (or q to quit): headphones
Queue: [headphones]
Enter an item to add (or q to quit): mouse
Queue: [headphones, mouse]
Enter an item to add (or q to quit): keyboard
Queue: [headphones, mouse, keyboard]
Enter an item to add (or q to quit): mobile
Queue: [headphones, mouse, keyboard, mobile]
Enter an item to add (or q to quit): q
Queue: [headphones, mouse, keyboard, mobile]
Press enter to remove an item (or q to quit): mobile
Queue: [mouse, keyboard, mobile]
Press enter to remove an item (or q to quit): mouse
Queue: [keyboard, mobile]
Press enter to remove an item (or q to quit): q
```

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/wnvWVB>

OUTPUT:



```
Problems Declaration Console x
<terminated> UniqueWords [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (03-Mar-2023, 1:01:41 am - 1:01:43 am) [pid: 25724]
Number of unique words: 21
```