Logo

Description automatically generated

<21/SP-COP-2800-55633> Java Programming

**<Assignment 7-15>**

Document Version: 0.1

Version Date: <September 21, 2021>

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* Document Version Control

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| Version | Date | Author | Rationale |
| 0.1 | 2022 Aug 19 | Shadarien Williams | First Draft |

* Document Purpose

The purpose of this document is to write a program that receives 10 numbers from the user and displays the numbers provides followed by the unique numbers afterwards.

* Technical Specifications

Purpose of Technical Implementation

The purpose of this implementation is to supply a quick and efficient way to removed duplicates from an array.

Technical Implementation Components

Implementation of the scanner class to allow user submission of numbers to receive input from the user

Technical Implementation Pseudocode:

**Remove duplicates from an Array***:*

*Program start*

*Initialize scanner class and save it as userInput*

*Created an array that has 10 empty spaces to store the users input*

*Created a for loop that requests 10 numbers from the user*

*created 2 strings for comparison “baseValues” which stores the original list and “distValues” which be used to compare later*

*Pass the given array to our newly made method named “eliminateDuplicates” and save it to a newly made array called “distinctIntegers”*

*eliminateDuplicates Method Start:*

*create new list with size of the array passed (this allows the program to scale in the future)*

*scan over the array and pass each item to a newly named method “linearSearch”*

*linearSearch Method Start:*

*iterate over array and check to see if letter is in the list already*

*if so, display or return the letter if not, exit the loop*

*method end*

*once the previous method is run, if the result is -1*

*save the exported number to the current place in the list and proceed.*

*eliminateDuplicates method end*

*Display original list*

*Display list with duplicates removed*

*Program end*

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