Chapter 9 Text Processing / Wrapper Class

# Character class character testing methods (Easy)

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| **Chapter 9 pg. 559-560** | |
| Total Lines: | 60 |
| Lines of code: | 36 |
| Time to code: | N/A |
| Description: | Tests the following methods against a character received from the user: isDigit, isLetter, isLetterOrDigit, isLowerCase, isUpperCase, isSpaceChar, and isWhiteSpace. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a java program demonstrating Java's Character class's character testing methods |
| Total Lines: | 34 |
| Lines of code: | 18 |
| Time to code: | <5sec |
| Description: | Tests the following methods against a character hardcoded in the program: : isDigit, isLetter, isLetterOrDigit, isLowerCase, isUpperCase, toLowerCase, toUpperCase, and isWhiteSpace. |
| Test: | Pass |

# Customer Number Validator (Easy)

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| **Chapter 9 pg. 560-562** | |
| Total Lines: | 71 |
| Lines of code: | 39 |
| Time to code: | N/A |
| Description: | Tests the Character methods in a customer number validator context. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a Java program to verify a customer number is in the right format using Character class methods |
| Total Lines: | 30 |
| Lines of code: | 25 |
| Time to code: | <5sec |
| Description: | Only uses one Character method to complete the prompt. |
| Test: | Pass |

# Circle Area using toUpperCase (Easy)

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| **Chapter 9 pg. 564-565** | |
| Total Lines: | 41 |
| Lines of code: | 21 |
| Time to code: | N/A |
| Description: | Outputs the area of a circle after receiving the radius as an input. Uses the Character method toUpperCase in a loop to ask user if they want to run the program again. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a program in Java that finds the area of a circle and loops the program again if the user types Y. Use the toUpperCase method to write this. |
| Total Lines: | 26 |
| Lines of code: | 20 |
| Time to code: | <5sec |
| Description: | Does the pretty much the exact same thing as the book code. Uses the correct method as intended. |
| Test: | Pass |

# Array Search (Easy)

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| **Chapter 9 pg. 567-568** | |
| Total Lines: | 38 |
| Lines of code: | 21 |
| Time to code: | N/A |
| Description: | Search an array of strings for an element that starts with a specified string using the startsWith method. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a java program that searches an array for an inputted name using the startsWith method |
| Total Lines: | 25 |
| Lines of code: | 19 |
| Time to code: | <5sec |
| Description: | Does the pretty much the exact same thing as the book code. Uses the correct method as intended. |
| Test: | Pass |

# String Analyzer (Easy)

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| **Chapter 9 pg. 574-575** | |
| Total Lines: | 46 |
| Lines of code: | 27 |
| Time to code: | N/A |
| Description: | Converts a String object to an array then uses the array too determine the number of letters, digits, and white space in the string. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a java program that counts the number of digits, letters, and whitespace in a program |
| Total Lines: | 29 |
| Lines of code: | 23 |
| Time to code: | <5sec |
| Description: | Does the pretty much the exact same thing as the book code. Uses the correct method as intended. |
| Test: | Pass |

# Telephone Number Formatter (Medium)

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| **Chapter 9 pg. 574-575** | |
| Total Lines: | 146 |
| Lines of code: | 55 |
| Time to code: | N/A |
| Description: | A program that checks if a phone number is formatted correctly, format a number, and to remove the format. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a java program that formats a phone number, checks if a phone number is formatted, or removes the formatting from a phone number if it is formatted |
| Total Lines: | 53 |
| Lines of code: | 42 |
| Time to code: | <5sec |
| Description: | Does the pretty much the exact same thing as the book code. It works a little different by asking the user to specify which operation they would like to do to the phone number. |
| Test: | Pass |

# Split method (Easy)

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| **Chapter 9 pg. 590-591** | |
| Total Lines: | 20 |
| Lines of code: | 10 |
| Time to code: | N/A |
| Description: | Demonstrates the split method |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a java program that demonstrates the split methods |
| Total Lines: | 16 |
| Lines of code: | 11 |
| Time to code: | <5sec |
| Description: | Does the pretty much the exact same thing as the book code. |
| Test: | Pass |

# Test Score Reader (Easy)

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| **Chapter 9 pg. 597-599** | |
| Total Lines: | 125 |
| Lines of code: | 53 |
| Time to code: | N/A |
| Description: | Opens a csv file and gets the averages of scores. |
| Test: | Pass |
| **AI (ChatGPT 3.5)** | |
| Prompt: | Write a java test averages program that opens a csv file and gets the average test scores using java.io |
| Total Lines: | 37 |
| Lines of code: | 34 |
| Time to code: | <5sec |
| Description: | Does the pretty much the exact same thing as the book code. |
| Test: | Pass |