***Java Programming***

***Section 4.2 practice***

**Update accountgenerator Program:**

import java.util.regex.\*;

public class AccountGenerator {

public static void main(String[] args) {

// Example input (could be obtained from a user or another source)

String input = "John Doe"; // Replace with actual input logic

// Regular expression to match "one or more characters followed by a space and one or more characters"

String regex = "^[\\p{L}]+ [\\p{L}]+$";

// Create a Pattern object

Pattern pattern = Pattern.compile(regex);

// Create matcher object

Matcher matcher = pattern.matcher(input);

if (matcher.matches()) {

System.out.println("Valid name format.");

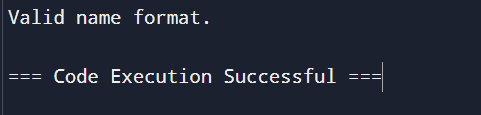
} else {

System.out.println("Incorrect format for name");

}

}

}



**Decipher Coded Answer Key**

import java.util.regex.\*;

import java.io.\*;

public class AnswerKeyProblem {

public static void main(String[] args) {

BufferedReader codedAnswers = null;

try {

// Attempt to open the file

codedAnswers = new BufferedReader(new FileReader("CodedAnswerKey"));

String line;

StringBuilder answers = new StringBuilder();

// Regular expression to match valid answer characters

String regex = "^[aAbBcCdDeEfF]$";

Pattern pattern = Pattern.compile(regex);

// Read each line and check if it matches the pattern

while ((line = codedAnswers.readLine()) != null) {

Matcher matcher = pattern.matcher(line);

if (matcher.matches()) {

answers.append(line);

}

}

// Print the collected answers

System.out.println(answers.toString());

} catch (FileNotFoundException e) {

System.err.println("The file 'CodedAnswerKey' was not found.");

} catch (IOException e) {

System.err.println("An error occurred while reading the file.");

} finally {

try {

if (codedAnswers != null) {

codedAnswers.close();

}

} catch (IOException e) {

System.err.println("Failed to close the file reader.");

}

}

}

}

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**Replace Characters and Convert to Lower Case**

public class AnswerKeyProcessor {

public static String finalAnswers(String answers) {

// Replace 'e' with 'b', 'E' with 'A', 'f' with 'c', and 'F' with 'D'

answers = answers.replaceAll("e", "b")

.replaceAll("E", "A")

.replaceAll("f", "c")

.replaceAll("F", "D");

// Convert to lower case

return answers.toLowerCase();

}

public static void main(String[] args) {

// Example answers string

String answers = "eE fF";

// Process the answers

String processedAnswers = finalAnswers(answers);

// Print the result

System.out.println(processedAnswers);

}

}

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