Assignment 3

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CPSC 1150

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# Exercise 1

## Program Count

**File name:** Count.java

**Purpose:** To prompt the user to enter a string, and count and display the number of uppercase letters and digits in it.

**Packages:** java.util.Scanner

**Limitations:** The input must be of type String.

**Input:** A string, stored in the variable *frase*.

**Output:** A message containing the number of uppercase letters and digits.

**Pseudocode:**

Algorithm *Count*

START

(*main*)

Set string *frase*

Read *frase*

Print “The number of uppercase letters is “ + *countUpperCase*( *frase* )

Print “The number of digits is “ + *countDigits*( *frase* )

(*countUpperCase*, arguments: string *frase*)

Set *count* = 0

For *i* in *frase*

{

If frase[ *i* ] >= 65 && *frase*[ *i* ] <= 90 then

{

*count*++

}

}

Return *count*

(*countDigits*, arguments: string *frase*)

Set *count* = 0

For *i* in *frase*

{

If frase[ *i* ] >= 48 && *frase*[ *i* ] <= 57 then

{

*count*++

}

}

Return *count*

END *Count*

**Test run(s):**

A black screen with white text

Description automatically generated with low confidence

A black screen with white text

Description automatically generated with low confidence

A black background with white text

Description automatically generated with low confidence

# Q1 – Question 1

## Program (program name)

**File name:** (file’s relative path)

**Purpose:** To have a sample from which to create external documentation.

**Packages:** (list of imported packages)

**Limitations:** (input it can’t handle, list of possible error messages, round-off error)

**Bugs:** (list of unfixed bugs)

**Input:** …

**Output:** …

**Pseudocode:**

Algorithm (program name)

START

1. Step 1
2. .
3. .
4. .

END (program name)

**Test run(s):**

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**Input:** …

**Output:** …

**Pseudocode:**

Algorithm (program name)

START

1. Step 1
2. .
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4. .

END (program name)

**Test run(s):**

# Q1 – Question 1

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**Input:** …

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2. .
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4. .

END (program name)

**Test run(s):**