Word Count Specification:

1. Definition:

document ::= import <doc\_name>

char ::= "all characters"

separator ::= space,

|line break

|tab

text ::= seq char

word ::= seq1 (char \ blank)

s == separator

w == word

l,r == text\_string

2. Schema:

Function Word Split

text -> words

if words = <> then ∅

if words = s then ∅

if words = w then { w }

if words = sr then Word Split (r)

if words = ls then Word Split (l)

if words = lsr then Word Split (l) U Word Split (r)

Function Word Count

text -> num

num = ♯ Set (words text)

Function Character Count

text -> num

num = ♯ (characters text)

Function Line Count

text -> num

num = ♯ (lines text)

Function Text Break

text -> words

if words = <> then ∅

if words = s then {s}

if words = w then { w }

if words = sr then Word Split (r)

if words = ls then Word Split (l)

if words = lsr then Word Split (l) U Word Split (r)

Function Word to String

words -> text

text = String(word)

Function Word Replacement

text -> text

TextBreak()

target\_word? : t\_w

new\_word? : n\_w

{ w∈words | If w = t\_w then t\_w := n\_w }

WordtoString()