# I. Basic Case Conversion (Lower to Upper and Vice-Versa)

## Test 1: Simple Lowercase to Uppercase:

Input: "αβγδεζηθικλμνξοπρστυφχψω"

Expected Output (Uppercase): "AB $\Gamma\Delta$ EZHOIK $\Lambda$ MN $\Xi$ O $\Pi$ P $\Sigma$ TY $\Phi$ X $\Psi$  $\Omega$ " Purpose: Check the basic lowercase to uppercase conversion for all letters.

#### **OTpanel**

Output: AB $\Gamma\Delta$ EZH $\Theta$ IK $\Lambda$ MN $\Xi$ O $\Pi$ P $\Sigma$ TY $\Phi$ X $\Psi\Omega$  (no language selected) Output: AB $\Gamma\Delta$ EZH $\Theta$ IK $\Lambda$ MN $\Xi$ O $\Pi$ P $\Sigma$ TY $\Phi$ X $\Psi\Omega$  (language Greek activated)

# TypeMenu

Output:  $AB\Gamma\Delta EZH\ThetaIK\Lambda MN\Xi O\PiP\Sigma TY\Phi X\Psi\Omega$  (no language selected) Output:  $AB\Gamma\Delta EZH\ThetaIK\Lambda MN\Xi O\PiP\Sigma TY\Phi X\Psi\Omega$  (language Greek activated)

#### Test 2: Simple Uppercase to Lowercase:

Input: "ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ"

Expected Output (Lowercase): "αβγδεζηθικλμνξοπρστυφχψω"

Purpose: Check the basic uppercase to lowercase conversion for all letters.

### **OTpanel**

Output: αβγδεζηθικλμνξοπρστυφχψω (no language selected) Output: αβγδεζηθικλμνξοπρστυφχψω (language Greek activated)

#### TvpeMenu

Output: αβγδεζηθικλμνξοπρστυφχψω (no language selected)
Output: αβγδεζηθικλμνξοπρστυφχψω (language Greek activated)

### Test 3: Mixed Case:

Input: "ΑβΓδΕζΗθΙκΛμΝξΟπΡσΤυΦχΨω"

Expected Output (Uppercase): "ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ" Expected Output (Lowercase): "αβγδεζηθικλμνξοπρστυφχψω" Purpose: Test mixed input to both all caps and all lowercase.

### **OTpanel**

Output (Uppercase): ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ (no language selected) Output (Lowercase): αβγδεζηθικλμνξοπρστυφχψω (no language selected)

Output (Uppercase): ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ (language Greek activated) Output (Lowercase): αβγδεζηθικλμνξοπρστυφχψω (language Greek activated)

#### TypeMenu

Output (Uppercase): ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ (no language selected) Output (Lowercase): αβγδεζηθικλμνξοπρστυφχψω (no language selected)

Output (Uppercase): ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ (language Greek activated) Output (Lowercase): αβγδεζηθικλμνξοπρστυφχψω (language Greek activated)

# II. Sigma Handling (Final vs. Non-Final)

### Test 4: Non-Final Sigma to Uppercase (Simple Word):

Input: "συνάδελφος"

Expected Output (Uppercase): "ΣΥΝΑΔΕΛΦΟΣ"

Purpose: Check the ' $\sigma$ ' to ' $\Sigma$ ' conversion in a word with no final sigma.

# **OTpanel**

Output:  $\Sigma YNA\Delta E \Lambda \Phi O \Sigma$  (no language selected) Output:  $\Sigma YNA\Delta E \Lambda \Phi O \Sigma$  (language Greek activated)

#### TypeMenu

Output: ΣΥΝΆΔΕΛΦΟΣ (no language selected)

#### Output: ΣΥΝΑΔΕΛΦΟΣ (language Greek activated)

Test 5: Final Sigma to Uppercase in multi-word string:

Input: "Ένας καλός κόσμος είναι εδώ"

Expected Output (Uppercase): "ENA $\Sigma$  KA $\Lambda$ O $\Sigma$  KO $\Sigma$ MO $\Sigma$  EINAI E $\Delta$ Q"

Purpose: Test sigma conversion when it is at the end of a word inside a string of words.

**OTpanel** 

Output: ENA $\Sigma$  KA $\Lambda$ O $\Sigma$  KO $\Sigma$ MO $\Sigma$  EINAI E $\Delta$  $\Omega$  (no language selected) Output: ENA $\Sigma$  KA $\Lambda$ O $\Sigma$  KO $\Sigma$ MO $\Sigma$  EINAI E $\Delta$  $\Omega$  (language Greek activated)

TypeMenu

Output:  $\dot{E}NA\Sigma KA\Lambda \dot{O}\Sigma KO\Sigma MO\Sigma E'INAI E\Delta \dot{\Omega}$  (no language selected) Output:  $ENA\Sigma KA\Lambda O\Sigma KO\Sigma MO\Sigma EINAI E\Delta \Omega$  (language Greek activated)

## Test 6: Final Sigma to Lowercase:

Input: "ΣΑΣ"

Expected Output (Lowercase): "σας"

Purpose: Test that uppercase sigma converts back to lowercase final sigma if in the last letter of the word.

**OTpanel** 

Output: σασ (no language selected)
Output: σασ (language Greek activated)

TypeMenu

Output: σας (no language selected)
Output: σας (language Greek activated)

### Test 7: Multiple Sigmas in a Word (Mixed Cases):

Input: "Συσσωματώσεις"

Expected Output (Uppercase): "ΣΥΣΣΩΜΑΤΩΣΕΙΣ" Expected Output (Lowercase): "συσσωματώσεις"

Purpose: Verify handling of multiple sigmas, in particular in lowercase.

**OTpanel** 

Output (Uppercase): ΣΥΣΣΩΜΑΤΩΣΕΙΣ (no language selected) Output (Lowercase): συσσωματώσεις (no language selected) Output (Uppercase): ΣΥΣΣΩΜΑΤΩΣΕΙΣ (language Greek activated) Output (Lowercase): συσσωματώσεις (language Greek activated)

TypeMenu

Output (Uppercase): ΣΥΣΣΩΜΑΤΏΣΕΙΣ (no language selected)
Output (Lowercase): συσσωματώσεις (no language selected)
Output (Uppercase): ΣΥΣΣΩΜΑΤΩΣΕΙΣ (language Greek activated)
Output (Lowercase): συσσωματώσεις (language Greek activated)

### Test 8: Final Sigma Before a Punctuation:

Input: "Ο καιρός ήταν καλός."

Expected Output (Uppercase): "Ο ΚΑΙΡΟΣ ΗΤΑΝ ΚΑΛΟΣ."

Purpose: Check that a final sigma will properly change in uppercase even if it is followed by a punctuation

OTpanel

Output: O KAIPO $\Sigma$  HTAN KA $\Lambda$ O $\Sigma$  (no language selected) Output: O KAIPO $\Sigma$  HTAN KA $\Lambda$ O $\Sigma$  (language Greek activated)

TypeMenu

Output: O KAIPO $\Sigma$  'HTAN KA $\Lambda$ O $\Sigma$  (no language selected) Output: O KAIPO $\Sigma$  HTAN KA $\Lambda$ O $\Sigma$  (language Greek activated)

# Test 9: Final Sigma BeforeAfter a Punctuation:

Input: "Ο ΚΑΙΡΟΣ HTAN ΚΑΛΟΣ."

Expected Output (Lowercase): "Ο καιρός ήταν καλός."

Purpose: Check that a final sigma will properly change in uppercase even if it is followed by a punctuation

**Updated Tests (with Corrections)** 

**OTpanel** 

Output: ο καιροσ ηταν καλοσ (no language selected)
Output: ο καιροσ ηταν καλοσ (language Greek activated)

TypeMenu

Output: ο καιρος ηταν καλος (no language selected)
Output: ο καιρος ηταν καλος (language Greek activated)

## III. Accents Handling (Correct - No Changes)

# Test 10: Lowercase Accented Vowels to Uppercase (All Accents):

Input: "άέἡίουώ"

Expected Output (Uppercase): "AEHIOYΩ"

Purpose: Verify accents are removed on uppercase conversion of fully-uppercase text.

OTpanel

Output:  $AEHIOY\Omega$  (no language selected) Output:  $AEHIOY\Omega$  (language Greek activated)

TypeMenu

Output:  $AEHIOY\Omega$  (no language selected)
Output:  $AEHIOY\Omega$  (language Greek activated)

### Test 11: Uppercase to Lowercase with Accents:

Input: "ΑΕΗΙΟΥΩ"

Expected Output (Lowercase): "αεηιουω"

Purpose: Verify accents are NOT added back when converting to lowercase.

OTpane

Output: αεηιουω (no language selected)
Output: αεηιουω (language Greek activated)

TypeMenu

Output: αεηιουω (no language selected)
Output: αεηιουω (language Greek activated)

#### Test 12: Title Case with Accented First Letter:

Input: "Άλφα"

Expected Output (Title Case - First Letter Uppercase): "A $\lambda \varphi \alpha$ " Purpose: Check that title case does not strip out the accent.

TypeMenu

Output: Άλφα (no language selected) Output: Άλφα (language Greek activated)

### Test 13: Title case when accented letter is not first:

Input: "πολύ"

Expected Output (Title case): "Πολύ"

Purpose: Check that title case does not add accents in subsequent letters.

TypeMenu

Output: Πολύ (no language selected) Output: Πολύ (language Greek activated)

### Test 14: Title case when uppercase letter is not the first:

Input: "ΆΛφα"

Expected Output (Title Case): "Άλφα"

Purpose: Check that title case preserves accent if it exists in uppercase and the first letter of the word.

TypeMenu

Output: Άλφα (no language selected)
Output: Άλφα (language Greek activated)

### Test 15: Accented word in sentence:

Input: "Αυτό είναι το σωστό"

Expected Output (Title case): "Αυτό Είναι Το Σωστό"

Purpose: Test that title case properly handles accented first letters when multiple words are present.

TypeMenu

Output: Αυτό Είναι Το Σωστό (no language selected) Output: Αυτό Είναι Το Σωστό (language Greek activated)

### Test 16: Title case with no accents:

Input: "αλφα"

Expected Output (Title Case): "Αλφα"

Purpose: Test that title case does add an accent if it's the standard form of that uppercase letter.

TypeMenu

Output: Αλφα (no language selected)
Output: Αλφα (language Greek activated)

# IV. Dieresis Handling (Revised Again!)

### Test 17: Lowercase Dieresis:

Input: "ïü"

Expected Output (Uppercase): "ÏŸ"

Purpose: Verify dieresis is preserved on uppercase conversion.

**OTpanel** 

Output: ÏŸ (no language selected)
Output: ÏŸ (language Greek activated)

TypeMenu

Output: ÏŸ (no language selected) Output: ÏŸ (language Greek activated)

#### Test 18: Accented Dieresis:

Input: "ເັບ"

Expected Output (Uppercase): "ÏŸ"

Purpose: Verify dieresis is preserved and accents are removed on uppercase conversion.

**OTpanel** 

Output: ÏŸ (no language selected) Output: ÏŸ (language Greek activated)

TypeMenu

Output: IY' (no language selected)
Output: IY' (language Greek activated)

# Test 19: Uppercase to Lowercase Accented Dieresis:

Input: "ÏŸ"

Expected Output (Lowercase with accents and dieresis): "iü"

Purpose: Verify proper conversion and re-introduction of dieresis and accents after going through uppercase

**OTpanel**