Enjoying Exercism? We need your help to survive... Please donate if you can! Tracks / (ALD) ABAP / Exercises / Atbash Cipher Suh @SuellenMiranda ✓ You've completed Atbash Cipher. Your Journey Settings Atbash Cipher 🔗 Sign out Completed Medium Overview Your iterations 1 (a) Community Solutions Code Review O Submitted via Editor, 32 minutes ago • Passed zcl_atbash_cipher.clas.abap Analysis Pests 1 CLASS zcl_atbash_cipher DEFINITION PUBLIC FINAL CREATE PUBLIC. • ALL TESTS PASSED 4 METHODS decode 5 IMPORTING 6 cipher_text TYPE string
7 RETURNING PASSED Test 1
 ENCODE1 VALUE(plain_text) TYPE string . 9 METHODS encode 10 IMPORTING
11 plain_text TYPE string PASSED Test 2
 ENCODE2 RETURNING

VALUE(cipher_text) TYPE string . PASSED Test 3
 ENCODE3 15 PRIVATE SECTION. PASSED Test 4
 ENCODE4 16 CONSTANTS: Alphabet TYPE c LENGTH 26 VALUE 'abcdefghijklmnopqrstuvwxyz'. 18 CLASS-METHODS encode_character
19 CHANGING PASSED Test 5
 ENCODE5 char TYPE c. 21 ENDCLASS. PASSED Test 6
 ENCODE6 25 CLASS zcl_atbash_cipher IMPLEMENTATION. • PASSED Test 7
ENCODE7 28 " decoding and encoding is mostly the same with this cipher.
29 plain_text = encode(cipher_text). • PASSED Test 8
ENCODE8 30 " except for the occasional space after every 5th character 31 REPLACE ALL OCCURRENCES OF `` IN plain_text WITH ''. PASSED Test 9
 DECODE1 32 ENDMETHOD. PASSED Test 10
 DECODE2 " removing all characters from the string except digits and lowercase letters REPLACE ALL OCCURRENCES OF REGEX '[^a-z0-9]' IN input_text WITH ''. PASSED Test 11
 DECODE3 39 DATA char TYPE c LENGTH 1. 40 DATA ascii TYPE i. • PASSED Test 12
• DECODE4 42 * " for converting a char to its ascii value DATA(conv_out) = cl_abap_conv_out_ce=>create(encoding = 'UTF-8' endian = 'L'). 44 * "for converting an ascii value to the matching char
45 * DATA(conv_in) = cl_abap_conv_in_ce=>create(encoding = 'UTF-8'). • PASSED Test 13
DECODE5 47 DATA(strlen) = STRLEN(input_text). PASSED Test 14
 DECODE6 DO strlen TIMES. DATA(charPos) = sy-index - 1. char = input_text+charPos(1). " check if the character is a letter IF char CO Alphabet. encode_character(CHANGING char = char). " resetting so the buffer is empty conv_out->reset(). conv_out->write(data = char). " using implicit conversion to get the ascii's int value " getting the ascii value for the character on the opposite side of the Alphabet ascii = 122 - ascii + 97. cipher_text = cipher_text && char. " a space is put after every 5 letters, but not at the end of the cipher text IF sy-index MOD 5 = 0 AND sy-index <> strlen. cipher_text = cipher_text && ` `. ENDDO. 74 ENDMETHOD. 76 METHOD encode_character. DATA(letterPos) = sy-index - 1. 79 DATA(letter) = Alphabet+letterPos(1) 80 IF letter = char. DATA(cipher_pos) = 25 - letterPos. char = Alphabet+cipher_pos(1). 84 ENDIF. 87 ENDCLASS. < □ >