CXW programming language

Documentation:

This mini programming language is similar to C++, but it has the some differences:

* read(var) - reads a value and stores it in ‘var’
* print(var) - prints a string or int value to the console
* statements don’t end with ‘;’
* variable declaration follows this rule: a (int), b(string)
* comments are used using ‘--’ syntax
* a variable name must start with \_ or a letter

# P1

-- Check if a number is a palindrome --

n (int), original (int), reversed (int), remainder (int) print("Enter a number: ")

read(n) original = n reversed = 0 while n > 0 {

remainder = n % 10

reversed = reversed \* 10 + remainder n = n / 10

}

if original == reversed {

print("The number is a palindrome.")

} else {

print("The number is not a palindrome.")

}

# P2

-- Sum of n numbers -- n (int), number (int)

print("How many numbers do you want to sum?\n") read(n)

sum (int) = 0 index (int) = 1

while index <= n { read(number)

sum = sum + number;

}

print("The sum is") print(sum)

# P3

-- Base 10 to Base 2 Conversion --

n (int), remainder (int), binary (int), factor (int) print("Enter a number in base 10: ")

read(n) binary = 0

factor = 1 while n > 0 {

remainder = n % 2;

binary = binary + remainder \* factor; n = n / 2;

factor = factor \* 10;

}

print("The binary equivalent is: ") print(binary)

# P1 error

-- Min of 3 numbers --

a (int), 2b (int), c (int) -- a variable name should start with \_ or a letter

read(a); -- lines of code don't use ';' read(b)

read(c)

smallest (int) = a if smallest > b {

smallest = b

}

if smallest > c {

smallest = c

}

print(smallest)