

Design:

DEFINE a dictionary COIN_VALUES that maps coin names to their values in dollars:

"penny" -> 0.01

"pennies" -> 0.01

"nickel" -> 0.05

"nickels" -> 0.05

"dime" -> 0.10

"dimes" -> 0.10

"quarter" -> 0.25

"quarters" -> 0.25

FUNCTION parse_sentence(sentence):

 CONVERT sentence to lowercase

 STRIP leading and trailing spaces from sentence

 SPLIT sentence on the string " and " into a list of coin_groups

 SET total_value = 0.0

 FOR each group in coin_groups:

 STRIP spaces from group

 SPLIT group by spaces into [quantity_string, denomination]

 CONVERT quantity_string to integer quantity

 LOOK UP denomination in COIN_VALUES to get coin_value

 ADD (quantity * coin_value) to total_value

 RETURN total_value

MAIN PROGRAM:

 READ a line of input from the user as sentence

 CALL parse_sentence(sentence) and store the result in amount

 FORMAT amount to two decimal places

 PRINT the formatted amount