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#POUATCHA
#07/16/2023
#P5LAB
#User-defined functions
import random

#Function to determine change returned to customer
def disperse_change(change):

    if change == 0:
        print("No Change Due")

    #Calculate the amount of each coin needed
    #integer division - //

    num_dollars = change // 100
    change = change - (num_dollars * 100)

    num_quarters = change // 25
    change = change - (num_quarters * 25)

    num_dimes = change // 10
    change = change - (num_dimes * 10)

    num_nickles = change // 5
    change = change - (num_nickles * 5)

    num_pennies = change // 1

    #Display coins owed

    if num_dollars > 0:
        print(num_dollars, end=" ")
        if num_dollars == 1:
            print("Dollar")
        else:
            print("Dollars")

    if num_quarters > 0:
        print(num_quarters, end=" ")
        if num_quarters == 1:
            print("Quarter")
        else:
            print("Quarters")

    if num_dimes > 0:
        print(num_dimes, end=" ")
        if num_dimes == 1:
            print("Dime")
        else:
            print("Dimes")

    if num_nickles > 0:
        print(num_nickles, end=" ")
        if num_nickles == 1:
            print("Nickle")
        else:
            print("Nickles")

    if num_pennies > 0:
        print(num_pennies, end=" ")
        if num_pennies == 1:
            print("Penny")
        else:
            print("Pennies")

#Main Function
def main():
    # generate a random float number
    amount_owed = round(random.uniform(0.01, 100.00), 2)

    #display the amount owed
    print(f"You owe ${amount_owed:.2f}")

    # prompt user to enter float as the cash they will put into checkout machine
    amount_paid = float(input("How much cash will you put in the self_checkout? "))
    #calculate change owed
    change_owed = amount_paid - amount_owed
    #display change owed
    print(f"Change is: ${change_owed:.2f}")
    print()

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#convert the change owed to an integer
change_owed = round(change_owed * 100)

# call function and pass the change owed as a parameter
disperse_change(change_owed)
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#Call the main function
main()
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