**Tuple Challenges 1 – 6**

# ChallengesTuples.py

#

# @ author: A. N. Other

# date: September 2016

print("Here are challenges 1 and 2...\n")

#tuple with different datatypes (Challenge 1 and Challenge 2)

julia = ("Julia", "Roberts", 1967, "Actress", "Atlanta, Georgia")

print(julia, "\n")

print("Here is challenge 3...\n")

#tuple with five numbers. Print the third (Challenge 3)

lotto\_balls = (1,45,23,78,34,24)

print("The third lotto ball was :", lotto\_balls[2], "\n")

print("Here is challenge 4...\n")

# tuple with three strings. (Challenge 4)

animals = ("cat", "dog", "horse")

animal\_1 = animals[0]

animal\_2 = animals[1]

animal\_3 = animals[2]

print(animal\_1, " ", animal\_2, " ", animal\_3, "\n")

print("Here is challenge 5...\n")

#tuple with six elements. Challenge 5

lotto\_balls = (1,45,23,78,34,24)

print("The fourth lotto ball was :", lotto\_balls[3], "\n")

print("The fourth from last lotto ball was :", lotto\_balls[-4], "\n")

print("Here is challenge 6...\n")

#tuple with duplicates. Challenge 6

items = (1,45,23,78,34,24, 45,24, 24)

repeated\_items = []

for counter in range (0,len(items)):

    for number in range(counter+1, len(items)):

        if items[counter] == items[number]:

            repeated\_items.append(items[number])

individual\_repeats = set(repeated\_items)

print(individual\_repeats)

'''

# test case assertions

Challenges 1 and 2 output = ('Julia', 'Roberts', 1967, 'Actress', 'Atlanta, Georgia')

Challenge 3 output = The third lotto ball was : 23

Challenge 4 output = cat   dog   horse

Challenge 5 output is:

The fourth lotto ball was : 78

The fourth from last lotto ball was : 23

Challenge 6 output = {24, 45}

'''

**Challenge 7**

# TuplesChallenge7.py

#

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#tuple with duplicates.

items = (1,45,23,78,34,24, 45,24, 24)

found = 0

number = int(input("Enter the value you wish to search for\n"))

for counter in range (0,len(items)):

    if items[counter] == number:

        found += 1

if found == 0:

    print("The number was not in the tuple")

elif found == 1:

    print("The number was in the tuple once")

else:

    print("The number was in the tuple more than once")

'''

# assertion

input= 3, output = "The number was not in the tuple"

input= 78, output = "The number was in the tuple"

input= 24, output = "The number was in the tuple more than once"

'''