Functions – Why and How

1. **Twenty questions Class Project Progress – Iteration 4**

It's a marathon (short 😊), not a sprint.

Iteration 4: Set target to random number

Don't forget "import random". Take a look at Python module random:

IDLE 🡪 Help 🡪Python Docs 🡪modules->r->random

* 1. **Import random**

use

target = **random.randint**(*1*, 25)

* 1. **from random import randint**

target = **randint**(1,25)

1. **Playing cards - deriving card functions from friends\_family**

Developing card playing games can be similar to our friends\_family set of files. In this problem the task is to develop a group of functions that facilitate the manipulation of cards. We are going to consider playing cards as text strings of the following format:

<Suit letter: S for Spades, H for Hearts, D for Diamonds, or C for Clubs>

followed by the ":" character

followed by the <rank: A for Ace, K for King, Q for Queen, J for Jack, or 1, 2, 3, … 10 for card number>

Examples: S:A for Ace of Spades, C:2 for duce of Spades, S:Q for queen of Spades

Please develop the following functions:

def list\_hand(prefix=None):

""" list cards in hand

:prefix: optional prefix for id

default: no prefix

"""

def add\_one\_card(card):

""" Adds one card to our list

:card: card's name

"""

def add\_cards(\*cards):

""" Add zero or more cards

:\*cards: zero or more card names

"""

def has\_card(ck\_card):

""" Check if card is in my\_hand

:ck\_card: name of card

:returns: True if new\_card is in my\_hand

"""

You are strongly encouraged to use the files exercises/functions/friends\_mod.py and friends\_4.py as a starting point – I did for the solutions. Solution files are in **exercises/functions/playing\_cards/.**

Sample output:

>>>

= RESTART: C:/Users/raysm/workspace/python/IntroductionToProgramming/exercises/functions/playing\_cards/test\_cards\_mod.py

add\_cards( S:A S:K S:Q S:J S:10 )

add\_one\_card(S:A)

my\_hand: S:A

add\_one\_card(S:K)

my\_hand: S:A, S:K

add\_one\_card(S:Q)

my\_hand: S:A, S:K, S:Q

add\_one\_card(S:J)

my\_hand: S:A, S:K, S:Q, S:J

add\_one\_card(S:10)

my\_hand: S:A, S:K, S:Q, S:J, S:10

my\_hand: S:A, S:K, S:Q, S:J, S:10

S:A is in hand

S:K is in hand

S:Q is in hand

S:J is in hand

S:10 is in hand

H:A is NOT in hand

D:K is NOT in hand

C:Q is NOT in hand

>>>