# Rock-paper-scissors-lizard-Spock template

# The key idea of this program is to equate the strings

# "rock", "paper", "scissors", "lizard", "Spock" to numbers

# as follows:

#

# 0 - rock

# 1 - Spock

# 2 - paper

# 3 - lizard

# 4 - scissors

# helper functions

def name\_to\_number(name):

# delete the following pass statement and fill in your code below

# convert name to number using if/elif/else

if name == "rock":

choice\_number = 0

elif name == "Spock":

choice\_number = 1

elif name == "paper":

choice\_number = 2

elif name == "lizard":

choice\_number = 3

elif name == "scissors":

choice\_number = 4

else:

print "invalid entry"

return choice\_number

# don't forget to return the result!

def number\_to\_name(number):

# delete the following pass statement and fill in your code below

# convert number to a name using if/elif/else

if number == 0:

choice\_name = "rock"

elif number == 1:

choice\_name = "Spock"

elif number == 2:

choice\_name = "paper"

elif number == 3:

choice\_name = "lizard"

elif number == 4:

choice\_name = "scissors"

else:

print "invalid entry"

return choice\_name

def rpsls(player\_choice):

# delete the following pass statement and fill in your code below

# print a blank line to separate consecutive games

print "\n"

# print out the message for the player's choice

print "Player chooses", player\_choice + "!"

# convert the player's choice to player\_number using the function name\_to\_number()

player\_number = name\_to\_number(player\_choice)

# compute random guess for comp\_number using random.randrange()

import random

comp\_number = random.randrange(0, 5) #5 is excluded from being an output

# convert comp\_number to comp\_choice using the function number\_to\_name()

comp\_choice = number\_to\_name(comp\_number)

# print out the message for computer's choice

print "Computer chooses", comp\_choice + "!"

# compute difference of comp\_number and player\_number modulo five

difference = player\_number - comp\_number

difference\_mod5 = difference % 5

# use if/elif/else to determine winner, print winner message

if difference == 0:

print "Player and computer tie!"

elif difference == 1 or difference == 2:

print "Player wins!"

elif difference == 3 or difference == 4:

print "Computer wins!"

elif difference == -1 or difference == -2:

print "Computer wins!"

elif difference == -3 or difference == -4:

print "Player wins!"

return

# test your code - THESE CALLS MUST BE PRESENT IN YOUR SUBMITTED CODE

rpsls("rock")

rpsls("Spock")

rpsls("paper")

rpsls("lizard")

rpsls("scissors")

# always remember to check your completed program against the grading rubric