Exercise 3 ArcPy

Answers 1-4 & 11

1. Properties vs. Methods

Properties define characteristics. They are written with a dot format “object.property” such as “self.name” or “movie.director”. Property “shows what properties the object has and if properties are read/write.” This is not to be confused with the method “Property()” where “Syntax: attribute\_name = property(get\_Attribute, set\_Attribute, del\_Attribute-optional-, doc\_Attribute-optional-)”

Methods define a class. Methods are functions that are part of an existing object or class. They are written with parenthesis. Parenthesis can be blank or accept the input parameters. “shows what you can do to the object (i.e. a function)” where “Syntax: Class C: def method(self, -other-arguments-optional): pass -do-something-here.” And ”A function in Python is defined by a def statement.”

2. Are the following Properties \*~P~\* or Methods \*~M~\* and why:

a. arcpy.env.overwriteOutput = True

\*~P~\* because no parenthesis, it’s saving the value as true

b. arcpy.SearchCursor(“roads”, “TYPE” <> 4’)

\*~M~\* because parenthesis, it’s doing a search

c. row.setValue(‘distance’,100)

\*~M~\* because parenthesis, it’s setting a value for each row

d. ArcGISProject.dateSaved

\*~P~\* because no parenthesis, it’s referring to the date the file was saved

e. Table.isBroken

\*~P~\* because no parenthesis, it’s calling the object and saying it’s broken

3. letterFunc

Two parameters yes (but the function has not been called, and there are no actual values set yet), they are strings (clue is in the “.lower” and “letterFunc”), and they are asking it to check the first character/letter of the string in its lowercase form to see if they are equivalent characters. If you input letterFunc(“Hello”, “howdy”), the function would return “True” because the inputs both start with “h”.

4. #HappyCakeDay

contacts = ["Mike", "Saul", "Bryan", "Jesse", "Skylar", "Marie"]

def HappyCakeDay(contacts):

for contact in contacts:

print("Happy Birthday " + contact + "!")

HappyCakeDay(contacts)

11.