

```

# *****
#
# NAME: Your Name
# DATE: date
# CLASS: GEOG410
# ASSIGNMENT: Exercise #
#
# DESCRIPTION: describe the script, what it does, how it does it,
#              and any other important information
#
# INSTRUCTIONS: usage instructions, i.e., inputs, outputs, and how to
#              run the script
#
# *****

# ***** IMPORT STATEMENTS *****
import sys
import arcpy
import os

# ***** GLOBAL CONSTANTS *****

A = "<put the path to your points shapefile here>"
B = "polygons.shp"
C = arcpy.SpatialReference(2913)
D = 10

# ***** FUNCTIONS *****

def function_1(var1, var2, var3, var4=None):
    """
    """
    #
    if not var4:
        var4 = arcpy.Describe(var1).SpatialReference

    #
    a = arcpy.CreateFeatureclass_management(os.path.dirname(var2),
                                           os.path.basename(var2),
                                           "POLYGON",
                                           template=var1,
                                           spatial_reference=var4)

    #
    b = [f.name for f in arcpy.Describe(infc).fields]

    #
    with arcpy.da.InsertCursor(a, ["SHAPE@"] + b) as c:
        #
        with arcpy.da.SearchCursor(var1, ["SHAPE@XY"] + b, spatial_reference=var4) as d:
            #
            for e in d:
                #
                # (Note the order of the operations below)
                m = arcpy.Point(e[0][0] - var3, e[0][1] - var3)
                n = arcpy.Point(e[0][0] - var3, e[0][1] + var3)
                o = arcpy.Point(e[0][0] + var3, e[0][1] + var3)
                p = arcpy.Point(e[0][0] + var3, e[0][1] - var3)

                #
                # (Continuing above note, try changing the order of these
                # variables in the array and see what happens)
                f = arcpy.Array([m, n, o, p])

                #
                g = arcpy.Polygon(f, var4)

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#
h = list(e)
h[0] = g

#
c.insertRow(h)
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# ***** MAIN *****
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```
def main():
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#
arcpy.env.overwriteOutput = True
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#
var1 = os.path.join(os.path.dirname(A), B)
```

```
#
function_1(A, var1, D, var4=C)
```

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return 0
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# ***** MAIN CHECK *****
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```
if __name__ == '__main__':
    sys.exit(main())
```