# File: Quiz1.docx

# Description: Basic Syntax of Python

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\* Write the Hello World program

def main():

print ("Hello World!")

main()

\* Define variables - int, float, str, and bool

# var int

int\_var = 12

# var float

float\_var = 12.1

# var str

str\_var = "12"

# var bool

bool\_var = True

\* Arithmetic Operators: + - \* / // % \*\*

# returns 5

3 + 2

# returns 1

3 - 2

# returns 6

3 \* 2

# returns 1.5

3 / 2

# returns 1

3 // 2

# returns 1

3 % 2

# returns 9

3 \*\* 2

\* Comparison Operators: < <= > >= == !=

# returns False

3 < 2

# returns False

3 <= 2

# returns True

3 > 2

# returns True

3 >= 2

# returns False

3 == 2

# returns True

3 != 2

\* Boolean Operators: not, and, or

# returns True

not (True and False)

# returns True

(1 <= 1) and (1 == 1)

# returns False

not (True or False)

\* Conditionals: if-else

def myFunc(myname):

if (myname == "Brooks"):

print ("Hello Brooks!")

else:

print ("Intruder!")

# prints “Hello Brooks!”

myFunc("Brooks")

\* Loops: while

# prints the sum of the integers 1 through 10

n = 1;

total = 0

while (n < 11):

total = n + total

n = n + 1

print(total)

\* Loops: for

# prints the sum of the integers 1 through 10

total = 0

for n in range(1, 11):

total = n + total

print(total)

\* Function:

# calling squared returns the square of n

def squared(n):

return n\*\*2

# returns 16

squared(4)

\* Simple Input from console:

def myFunc():

# stores the value inputted into the variable x

x = input("What is your name?")

print ("Hello", x)

# prompts user for an input then prints that input

myFunc()

\* Simple Output using print:

# prints "Hello World!") to the console

print ("Hello World!")

\* Define a list:

my\_list = ["a", "b", "c", "d"]

\* Print every element in a list:

my\_list = ["a", "b", "c", "d"]

# returns a, b, c, d, on separate lines

for p in my\_list:

print (p)

\* Define a tuple:

my\_tuple = "A", "B", "C", "D"

\* Print every element in a tuple:

my\_tuple = "A", "B", "C", "D"

# returns A, B, C, D, on separate lines

for p in my\_tuple:

print (p)

\* Define a set:

my\_set = {'a', 'b', 'c', 'd'}

\* Print every element in a set:

my\_set = {'a', 'b', 'b', 'c', 'd', 'd'}

# all duplicates will be deleted. Returns b, a, d, c on separate lines

for p in my\_set:

print (p)

\* Define a dictionary of 3 countries and their capitals:

my\_dictionary = {'UnitedStates': "Washington", 'Russia': "Moscow", 'China': "Beijing"}

\* Print the each key-value pair in the dictionary

my\_dictionary = {'UnitedStates': "Washington", 'Russia': "Moscow", 'China': "Beijing"}

# prints UnitedStates Washington, China Beijing, Russia Moscow on separate

# lines

for key, value in my\_dictionary.items():

print(key, value)