**Practice Problems for Functions**

1. Write a function named **times\_ten**. The function should accept an argument and return the product of its argument multiplied times 10.

**def times\_ten(n):**

**return n\*10**

1. What will the following program display?

**def main():**

**x = 1**

**y = 3.4**

**print(x, y, sep=':')**

**changeUs(x, y)**

**print(x, y, sep=':')**

**def changeUs(a, b):**

**a = 0**

**b = 0**

**print(a, b, sep=':')**

**main()**

**The output will be as follows:**

**1:3.4**

**0:0**

**1:3.4**

1. Look at the following function definition:

**def my\_function(a, b, c):**

**d = (a + c) / b**

**print(d)**

a. Write a statement that calls this function and passes 2 into

a, 4 into b, and 6 into c.

**my\_function(2, 4, 6)**

b. What value will be displayed when the function call executes?

**The output will be**

**2.0**

1. Is the following a legal Python program?

**def proc(x):**

**return x + 2**

**def main():**

**x = proc(5)**

**y = proc(4)**

**main()**

**Yes. The above lines of code are legal**

1. What is the output of the following program?

def proc(x):

print(x + 2)

def main():

x = proc(5)

print(x)

main()

**The output from the code above is as follows:**

**7**

**None**

1. Is the following a legal Python program?

**def proc(x):**

**return x + 2**

**def main():**

**x = proc(5, 3)**

**main()**

**This is not legal since the function proc() accepts only one argument but the call to the function includes two arguments**

1. Write a function that will accept an integer as an argument. It should randomly pick a value between 1 and that integer (inclusive), and return its square root. If the integer is negative or zero the function should terminate with an appropriate message.

**def get\_squareroot(n):**

**from math import sqrt**

**from random import randrange**

**if n <= 0:**

**print('Cannot get the square root for a negative number')**

**else:**

**return sqrt(randrange(1,n+1))**