## **Lab Exercises Chapter 6 Solutions**

Write a program that accepts a number from the user and uses a function to square the number then return the result. Print the result to the screen.

```
def sq(a):
    return a * a
num = int(input("Enter a number: "))
print (sq(num))
```

Write a function that returns the largest of two numbers. Test the function and print the results to the screen.

```
def largest(a, b):
    if a > b:
        return a
    return b

num1 = int(input("Enter number one: "))
num2 = int(input("Enter number two: "))
print (largest(num1, num2))
```

What is the difference between a local and a global variable?

Global is accessible from anywhere, local is only accessible within the function.

What makes a function recursive?

The function calls itself.

Write a program that prints first 10 positive numbers using a recursive function.

```
def display(num):
    if(num) :
        display(num-1)
    else :
        return
    print("{}".format(num))

limit = int(input("Enter a number: "))
print("\nNatural Numbers from 1 to {} are:".format(limit))
display(limit)
```