Session 1: Review of Basic Python (Solutions Only)

Case 1. Basestock Policy in Inventory Management

Write a function named `orderQuantity` that takes two input arguments, `inventory` and `basestock`. If `inventory` is at least equal to `basestock`, then return 0. Otherwise, return the difference between `basestock` and `inventory`. Set the default value for `inventory` to be 0 and for `basestock` to be 100. Include an appropriate docstring to explain what the function does.

[6]:
```
def orderQuantity(inventory=0,basestock=100):
    ''' Calculates order quantity given inventory level and basestock level'''
    if inventory>=basestock:
        return 0
    else:
        return basestock-inventory
```

[7]:
```
# Code to test your function
help(orderQuantity)
print(orderQuantity())
print(orderQuantity(25))
print(orderQuantity(51,50))
print(orderQuantity(basestock=200))
print(orderQuantity(inventory=80))
```

```
Help on function orderQuantity in module __main__:

orderQuantity(inventory=0, basestock=100)
    Calculates order quantity given inventory level and basestock level

100
75
0
200
20
```

Case 2. Blood Sugar Checker

Write a program that asks the user how many hours they have fasted and their current blood sugar level. If they have fasted less than 2 hours, then output `You need to fast at least 2 hours to perform this test.` If they fasted at least 2 hours but less than 8 hours, then output `Your blood sugar level is high` if it is more than 140, and `Your blood sugar level is normal` otherwise. If they have fasted for at least 8 hours, then the threshold changes to 100 (instead of 140).

```
[8]: hours=float(input('How many hours have you fasted: '))
     level=float(input('What is your blood sugar level: '))
     high_msg='You blood sugar level is high.'
     low_msg='Your blood suguar level is normal.'
     if hours<2:
         print('You need to fast at least 2 hours to perform this test.')
     elif hours<8:
         if level>140:
             print(high_msg)
         else:
             print(low_msg)
     else:
         if level>100:
             print(high_msg)
         else:
             print(low_msg)
```

```
How many hours have you fasted: 3
What is your blood sugar level: 50
Your blood suguar level is normal.
```