

## Lab Exercise

Use Jupyter Notebook to complete the exercises in this Lab. From Exercise 1 – 8 determine the output displayed.

- (1) 

```
num = 4
if num <= 9:
    print("Less than ten.")
elif num == 4:
    print("Equal to four.")
```
- (2) 

```
change = 356
if change >= 100:
    print("Your change contains", change // 100, "dollars.")
else:
    print("Your change contains no dollars.")
```
- (3) 

```
a = 2
b = 3
c = 7
if (a * b) < c:
    b = a
else:
    c = a+b+c
print(a, b, c)
```
- (4) 

```
length = eval(input("Enter length of cloth in yards: "))
if length < 1:
    cost = 3.00    # cost in dollars
else:
    cost = 3.00 + ((length - 1) * 2.50)
result = "Cost of cloth is ${0:0.2f}.".format(cost)
print(result)
```

(5)

```
number = 5
if number < 0:
    print("negative")
else:
    if number == 0:
        print("zero")
    else:
        print("positive")
```

In the following exercise, Identify the error, state the type of each error (syntax, runtime, or logic), and correct the block of code.

(6)

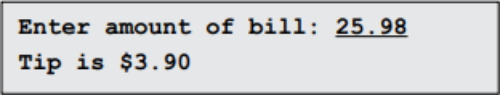
```
major = "Computer Science"
if major == "Business" Or "Computer Science":
    print("Yes" )
```

(7)

```
if a not b:
    print("Both are unequal")

else:
    print("Both are equal")
```

- (8) Write a program to determine how much to tip the server in a restaurant. The tip should be 15% of the check, with a minimum of \$2. See Fig. 1



```
Enter amount of bill: 25.98
Tip is $3.90
```

Fig.1 Possible outcome of exercise 8