## Assignment 2

January 25, 2020

## 1 Assignment 2

## 1.1 Problem 1

The code in the first cell below is one of the examples of conditional execution templates we went over in class. Your task is to use the code to build an equivalent function. In this function, the logical variables, which are set in the example, become parameters of the function. Name your function "ex1". Place your code in the code cell below the cell containing the original code. There are three commands I have already placed in that cell, where you will write. These commands serve to test the function you construct. Note that your function is void

```
[0]: # Do not write in this cell

cond1 = True
cond2 = True
cond3 = True
if cond1:
    print("Point A")
elif cond2:
    print("Point B")
elif cond3:
    print("Point C")
else:
    print("Point D")
print("Point E")
```

```
[30]: # Place your code here.

def ex1(cond1, cond2, cond3):
    if cond1:
        print(" Point A ", end="")
    elif cond2:
        print(" Point B ", end="")
    elif cond3:
        print(" Point C ", end="")
    else:
        print(" Point D ", end="")
```

```
print(" Point E ")

# Here are the three test commands

print("Test 1: ", end="")
ex1(True,True,True)

print("Test 2: ", end="")
ex1(False,False,False)

print("Test 3: ", end= "")
ex1(False,True,False)
```

Test 1: Point A Point E
Test 2: Point D Point E
Test 3: Point B Point E

## 1.2 Problem 2

Following the example we did in class, use the actual information in the syllabus for this class to write a function gcf(ng). The parameter ng is a numerical grade between 0 and 100. Your function should be fruitful and return a letter grade. In the cell below, I have placed three commands to test your function.

```
[57]: # Place your code here.
      # print("Enter your number grade from 0 - 100...")
      # nq = float(input())
      def gcf(ng):
          if ng >= 0 or ng <= 110: #110 for extra credit grades
              if ng < 60:
                  lg = "F"
                  return lg
              elif ng >= 60 and ng < 65:
                  lg = "D"
                  return lg
              elif ng \ge 65 and ng < 70:
                  lg = "D+"
                  return lg
              elif ng >= 70 and ng < 73:
                  lg = "C-"
                  return lg
              elif ng \ge 73 and ng < 76:
                  lg = "C"
                  return lg
              elif ng >= 76 and ng < 80:
```

```
lg = "C+"
            return lg
        elif ng \ge 80 and ng < 83:
            lg = "B-"
            return lg
        elif ng \geq 83 and ng < 86:
            lg = "B"
            return lg
        elif ng >= 86 and ng < 90:
            lg = "B+"
            return lg
        elif (ng \geq 90 and ng < 95):
            lg = "A-"
            return lg
        elif ng \ge 95 and ng \le 110:
            lg = "A"
            return lg
    # else:
        # print("Invalid Input...Try Again")
print(gcf(93))
print(gcf(86))
print(gcf(59))
```

A-

B+

F