

Lab 5 - Section A

CSE101 : Introduction to Programming
(Monsoon 2019)
11.09.2019

Learning objectives: Debugging

Question 1:

- The following code contains errors. Fix the code such that the objective is achieved as specified with the comments/descriptions in the code. The code should work for all inputs as per specification.
- You cannot modify the literal values or logic of the code.

Example:

- Incorrect modification:

some_function("string", "0", "1") -> some_function("modified_string", 0, 1)

- Correct modification:

a = b[0:2] + c[0:2] -> a = int(b[0:2]) + int(c[0:2])

```
def who_wins(sequence, x, y):  
  
    """  
    Print the winner of a game. Player X  
    wins if digit at index x in sequence is  
    greater than digit at index y in sequence.  
    Player Y wins if digit at index y in  
    sequence is greater than digit at index x  
    in sequence. Otherwise, nobody wins.  
  
    sequence: sequence of digits  
    x: index chosen by player X  
    y: index chosen by player Y  
  
    Precondition:  
    sequence is in string format  
    x and y are valid integer indices  
    """  
  
    x_value = sequence[x]  
    y_value = sequence[y]  
  
    if x_value/y_value > 1:
```

```
print("first wins")
elif x_value/y_value < 1:
print("second wins")
elif x_value/y_value = 1:
print("nobody wins")

who_wins("123123123", 0, 1)
```

Question 2:

Given the function DateMeRight which accepts the date in DD.MM.YYYY format, correct all logical and syntactical errors to return the date in DD-MMM-YYYY format where MMM is a string of the first 3 letters of the Month.

For example: For an input of “13.2.2019”, the function should return “13-Feb-2019”. Similarly, it should do this for all the legal dates. It can be assumed that the input always will be in the specified format.

Please note, you are to make changes in the given code itself. Any major changes will be penalized heavily.

```
def DateMeRight(date):
    """
    Returns the given date in DD-MMM-YYYY format, where MMM is the string of the
    first 3 Letters of the Month.
    Parameters:
    date: a String in DD.MM.YYYY format"""

    start_index=date.find(".")
    end_index=date.rfind(".")
    month=date[start_index:end_index]
    month_str=""

    if(month<=6):
        if(month<3):
            if(month==1):
                month_str="Jan"
            elif(month==2):
                month_str="Feb"
            else:
                month_str="Mar"
        else:
            if(month==5):
                month_str="May"
```

```
        else:
            month_str="Apr"
    else:
        if(month>9):
            if(month==10):
                month_str="Oct"
            else:
                month_str="Nov"
            if(month==12):
                month_str="Dec"
        elif(month<9):
            if(month==6):
                month_str="Jun"
            elif(month==7):
                month_str="Jul"
            else:
                month_str="Aug"
    return date[:s_index]+"-"+month_str+"-"+date[e_index+1:]
```

```
d="5.12.1533"
print(DateMeRight(d))
```