In class Practice 1/31/2020

Part I

1. A _____________ is a mutable ordered sequence of Python objects.
   - [✓ a. list]
   - b. tuple
   - c. both a & b
   - d. none of the above

2. After the *del* function or *remove* method are executed on a list, the items following the eliminated item are _____________.
   - [✓ a. moved one position left in the list]
   - b. moved one position right in the list
   - c. do not change position in the list
   - d. are also removed from the list

3. In the split method, if no separator is specified, the default is _____________.
   - [✓ a. any whitespace character]
   - b. a period (.)
   - c. a comma (,)
   - d. a number sign (#)

4. Which method turns a single string into a list of substrings?
   - [✓ a. split]
   - b. slice
   - c. join
   - d. splice

5. Which function returns the single-character string of the character with ASCII value n for nonnegative numbers?
   - [✓ a. chr(n)]
   - b. ascii(n)
   - c. ord(n)
   - d. string(n)

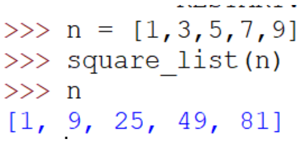
6. When reading data from a file, the open function returns a(n) ___________.
   - [✓ a. file object]
   - b. file name
   - c. file handle
   - d. file tuple

7. What function do you use to terminate a connection to a file?
   - [✓ a. close]
   - b. terminate
   - c. stop
   - d. disconnect

8. If a file that already exists is opened for writing:
    [✓ a.] the contents of the file will be erased
    b. the new data to be written will be appended to the end of the rile
    c. a Throwback error will occur
    d. the user will be prompted for the action they wish to take

Part II

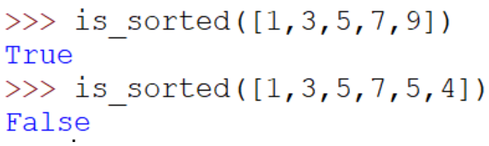
1. Write a Python function which will take a list as a parameter. Your function will modify each individual element of the list to its square.



```
>>> n = [1,3,5,7,9]
>>> square_list(n)
>>> n
[1, 9, 25, 49, 81]
```

```
def square_list(n):
    for i in len(n):
        n[i] == n[I]**2
```

2. Write a Python function which will determine if a list is already in sorted order.

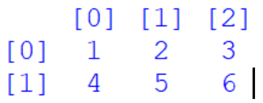


```
>>> is_sorted([1,3,5,7,9])
True
>>> is_sorted([1,3,5,7,5,4])
False
```

```
def is_sorted(x):

    return x == sorted(x)
```

3. Create a 2 by 3 list , use nested loop to
    a. Set each element’s value to an integer indicating the order in which it was processed by the nested loop
    b. Display the elements in tabular form. Use the column indices as headings across the top and the row indices to the left of each row



```
     [0]  [1]  [2]
[0]   1    2    3
[1]   4    5    6
```

```
value = [[0,0,0],[0,0,0]]
count = 1
for row in range(len(value)):
    for col in range(len(value[row])):
        value[row][col] = count
        count +=1
print("  ", end = "")

for  col in range(len(value[0])):
    print(f'([col])',end = '')
print()

for i,row in enumerate(values):
    print(f"([I])",end='')
    for value in row:
        print(f"(value:3d) ",end = '')
    print()
```