

**Modren programing language**

**Mid Term Assignment**

**Instructor = Fahim\_ullah**

**Student = Muhammad Yasir**

**ID = 15459**

**Computer Science**

**Q1: Print IQRA using 16-bit unicode (Hint: Escape Character)**

**Hex values I=0049 Q=0051 R=0052 A=0041**

**IN\_PUT:**

```
str = '\x49\x51\x52\x41'  
print(str)
```

**OUT-PUT:**

```
C:\Users\sala\PycharmProjects\assing\venv\Scripts\python.exe  
C:/Users/sala/PycharmProjects/assing/assing.py
```

**IQRA**

**Process finished with exit code 0**

**Q2: Suppose you have a string "Iqra National University" stored in a variable  
a. Write a program that**

- Converts the string into a List
- Insert an Element "Peshawar" at the end
- Sort the list
- Prints Abbreviation of the first 3 Elements and pthe 4rth Element complete each separated by a dot.

**ANSWER:**

**a) Converts the string into a List**

**IN\_PUT:**

```
def Convert(string) :  
    fullStr = ','.join(a)  
a = "Iqra National University"  
print(a)
```

**OUT-PUT:**

```
C:\Users\sala1\PycharmProjects\assing\venv\Scripts\python.exe  
C:/Users/sala1/PycharmProjects/assing/assing.py
```

Iqra National University

Process finished with exit code 0

## b) Insert an Element "Peshawar" at the end

IN\_PUT:

```
def Convert(string) :  
    fullStr = ','.join(a)  
    fullStr = ','.join(list2)  
  
a = "Iqra National University"  
list2 = "Peshawar"  
print(a)  
print(list2)
```

OUT-PUT:

```
C:\Users\sala1\PycharmProjects\assing\venv\Scripts\python.exe  
C:/Users/sala1/PycharmProjects/assing/assing.py
```

```
Iqra National University
```

```
Peshawar
```

```
Process finished with exit code 0
```

### c) Sort the list

IN\_PUT:

```
list = ['Iqra', 'National', 'University']  
for ele in sorted(list) :  
  
    print(ele)
```

OUT-PUT:

```
C:\Users\sala\PycharmProjects\assing\venv\Scripts\python.exe  
C:/Users/sala/PycharmProjects/assing/assing.py
```

Iqra

National

University

Process finished with exit code 0

**Q3: Suppose You have a list a=[[4,5,9], [1,5,3], [0,8,12], [3,1,9]]**

**Write a program that finds the list whose sum of elements is highest.**

IN\_PUT:

```
a = [[4, 5, 9], [1, 5, 3], [0, 8, 12], [3, 1, 9]]
def sum_list(a):
    sum_numbers = 0
    for x in a:
        sum_numbers += x
    return sum_numbers
print(max(a, key=sum))
print(sum_list([0, 8, 12]))
```

OUT-PUT:

```
C:\Users\sala1\PycharmProjects\assing\venv\Scripts\python.exe
C:/Users/sala1/PycharmProjects/assing/assing.py
```

```
[0, 8, 12]
```

```
20
```

```
Process finished with exit code 0
```

**Q5: Write a program that takes a string from the user and then print a new string by changing lowercase letters to uppercase letters and uppercase letters to lowercase letters. [Hint: Import String Class]**

**string: sTAY hoME STAY safe**

**IN\_PUT:**

```
def convertOpposite(str) :  
    ln = len(str)  
    for i in range(ln) :  
        if str[i] >= 'a' and str[i] <= 'z' :  
            str[i] = chr(ord(str[i]) - 32)  
        elif str[i] >= 'A' and str[i] <= 'Z' :  
            str[i] = chr(ord(str[i]) + 32)  
if __name__ == "__main__" :  
    str = "sTAY hoME STAY safe"  
    str = list(str)  
    convertOpposite(str)  
    str = ''.join(str)  
    print(str)
```

**OUT-PUT:**

C:\Users\sala1\PycharmProjects\assing\venv\Scripts\python.exe

C:/Users/sala1/PycharmProjects/assing/assing.py

StaY H0me stay SAFE

Process finished with exit code 0