

## Modern Programming Languages

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Q1. Print IQRA using 16-bit Unicode.

Answer:

```
# Print IQRA
```

```
a = "IQRA"
```

```
print ('\u0049', '\u0051', '\u0052', '\u0041')
```

Result:

IQRA

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

- 1) Converts the string into a list.
- 2) Insert element 'peshawar' at the end.
- 3) Sort the list
- 4) Prints abbreviation of first 3 elements and nth 4th element complete each separated by a dot.

PTO

```
# Splitting Iqra National University
```

```
a = "Iqra National University"
```

```
str.split(a)
```

```
a.append('Peshawar')
```

```
a.sort(reverse = True)
```

```
print('I.N.U.Peshawar')
```

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 some of ~~the~~ ~~elements~~ is highest.

**Program:**

```
a = [[4, 5, 9], [1, 5, 3], [0, 8, 12], [3, 1, 9]]  
print(max(num, key = sum))
```

**Output:**

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

(Which is true.)

Q5

Write a program that takes a string from user and then print a new string by changing lowercase letters to uppercase letters and uppercase letters to lowercase letters.

### Program:

```
def convertOpposite (str):  
    ln = len (str)  
    # First convert according ASCII  
    for i in range (ln):  
        if str[i] >= 'a' and str[i] <= 'z':  
            # Now lower to Upper case  
            str[i] = chr(ord(str[i]) - 32)  
        elif str[i] >= 'A' and str[i] <= 'Z':  
            # Finally upper into lower.  
            str[i] = chr(ord(str[i]) + 32)  
  
if __name__ == "__main__":  
    str = "STAY HOME AND Sa  
    str = "STAY HOME STAY safe"  
    str = list (str)  
  
    # calling.  
    convertOpposite (str)  
    str = "".join (str)  
    print (str).
```