1 .Reverse the word in sentence

In [105]:
```
str = "my name is Prafull"
str1 = str.split()
lst = []
for i in str1:
    lst.append(i[::-1])

print("Result as per condition is :",' '.join(lst))
```

```
Result as per condition is : ym eman si llufarP
```

2. Input : Aditya ---- output : AdItYa

In [106]:
```
str = "Aditya"

list = []
for i in str:
    if str.index(i) % 2 == 0:
        i1 = i.upper()
    else:
        i1 = i.lower()
    list.append(i1)
print("".join(list))
```

```
AdItYa
```

3. Input : a5b3d2 ---- output : aaaaabbbdd

In [107]:
```
str = "a5b3d2"
output = ""
for i in str:
    if i.isalpha():
        res = i
    else:
        n = int(i)
        output = output + (res*n)
print(output)
```

```
aaaaabbbdd
```

4. Input : a8z46dg3 ---- output : a8z46dg3

In [108]:
```
str = "a8z46dg3"
char_list = []
Num_list = []
for i in str:
    if i.isalpha():
        char_list.append(i)
    else:
        Num_list.append(i)
res = sorted(char_list) + sorted(Num_list)
print("".join(res))
```

```
adgz3468
```

5. First Char of list

In [109]:
```
input = ["Aditya" , "Prafull", "Rahul","Ayur","Pari","Ashish"]
lst = []
for i in input:
    lst.append(i[0])
print(lst)
```

```
['A', 'P', 'R', 'A', 'P', 'A']
```

6. Find duplicate number in integer list

In [110]:
```
lst = [3,4,5,72,5,5,3,6,4,23,65]
res = []
for i in range(len(lst)):
    for j in range(i+1,len(lst)):
        if lst[i] == lst[j] and lst[i] not in res:
            res.append(lst[i])
print(res)
```

```
[3, 4, 5]
```

7. Check if two strings are anagrams

In [111]:
```
def anagrams(s1 , s2):
    if set(s1) == set(s2):
        print("Given Strings are anagrams")
    else:
        print("Given Strings are not anagrams")

anagrams("prafull","kuhite")
anagrams("full","lluf")
```

```
Given Strings are not anagrams
Given Strings are anagrams
```

8. Remove all duplicates from list

In [112]:
```
lst = [3,4,5,72,5,5,3,6,4,23,65]
res = set(lst)
print(res)
```

```
{65, 3, 4, 5, 6, 72, 23}
```

9. Check if a string is a palindrome

In [113]:
```
def pallindrome(str):
    if str == str[::-1]:
        print("String is Pallindrome")
    else:
        print("String is Not Pallindrome")

pallindrome("prafull")
pallindrome("madam")
```

```
String is Not Pallindrome
String is Pallindrome
```

10. Get missing number in [1...25]

In [114]:
```
#lst = list(range(0,10))
lst = []
for i in range(0,10):
    lst.append(i)
print(lst)
#lst1 = list(range(0,25))
lst1 = []
for i in range(0,25):
    lst1.append(i)
print(lst1)

res = set(lst1) - set(lst)
print(res)
```

```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21,
22, 23, 24]
{10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24}
```

11. Reverse string using recursion

In [115]:
```
def reverse(string):
    if len(string) == 1:
        return string
    else:
        return reverse(string[1:]) + string[0]

reverse("hello")
```

Out[115]:
```
'olleh'
```

In [ ]:

In [ ]: