

Total Sheets
Used in this
question -

(6)

4/4/2022, 9:00 AM

MCA

SEM-I

OBJECT ORIENTED PROGRAMMING

Course Code - 223401101

Exam Rollno - 21234757009

(3) →

(a) →

Ans -

dictionary = {'7410023111': 'Ajay', '7411122222':
"Aniket"}

```
def MyTelephoneDict(name):  
    res = [] # will store number  
    for number, name in dictionary:  
        if n == name:  
            res.append(number)  
            # Appending the number  
    if len(res) == 0:  
        return "No Record Found"  
    else:  
        return res # list of number  
                    # where len(res) ≥ 1
```

Driver Code

```
if __name__ == "__main__":  
    name = input("Enter name")  
    result = MyTelephoneDict(name)  
    print(result)
```

(1)

Output

Enter name Aniket

['741112222']

b) →

Ans -

```
def checkPalindrome (lst):  
    """
```

It will return list of True or False . represents the corresponding element is palindrome or not

```
    """
```

```
    result = []
```

```
    for ele in lst:
```

```
        ele_str = str(ele) # because ele can  
                           # be of numeric  
                           # type as well.
```

```
        i = 0
```

```
        j = len(ele_str) - 1
```

```
        flag = True # Default Value
```

```
        while i < j:
```

```
            if ele_str[i] == ele_str[j]:
```

```
                i += 1
```

```
                j -= 1
```

```
            else:
```

```
                flag = False # Not Palindrome  
                break
```

(2)

```
result.append(flag) # out of while loop  
return result      # but inside for loop
```

Driver code

```
if __name__ == '__main__':
```

```
res = checkPalindrome(['aniket', 'nitin', 'a',  
                        777, 989, 99291, 1])
```

```
print(res)
```

Output

[False, True, True, True, True, False, True]


```
def getInterleaving(string1, string2, i, j, result, tempstring):
```

~~if~~ ~~circle detect~~

"""

It is a helper method which is recursive. will be adding our result into 'result' list, tempstring holding the string ~~from which we are using~~ for temporary basis helps to generate interleaved string.

i is the pointer to string1 and
j is the pointer to string2.

"""

```
if i < len(string1) and j < len(string2):  
    getInterleaving(string1, string2, i+1, j, result,  
                    tempstring + string1[i])
```

```
    getInterleaving(string1, string2, i, j+1, result,  
                    tempstring + string2[j])
```

```
elif i < len(string1):  
    tempstring += string1[i:]  
    result.append(tempstring)
```

(4)

```
elif j < len(string2):  
    tempstring += string2[j:]  
    result.append(tempstring)
```

```
def printInterleaving(string1, string2):  
    """  
    It prints the interleaving strings  
    """  
    res = []  
    getInterleaving(string1, string2, 0, 0, res, "")  
    print(res)
```

Driver Code

```
if __name__ == '__main__':  
    str1 = input("Enter String 1")  
    str2 = input("Enter String 2")  
    printInterleaving(str1, str2)
```

Output

Enter String 1 AB

Enter String 2 CD

['ABCD', 'ACBD', 'ACDB', 'CABD', 'CADB',
'CDAB']