

LAB 10: Program to find length of a list using recursion.

Program Logic

1. Define function to find length of list using recursion.
 - A. Pass one parameter as a list
 - B. check if it is valid list or not, if not return zero.
 - C. otherwise it is indexed and call function recursively, increment by 1 and return as output
2. In driver code
 - A. declare list
 - B. call the function and print length of list

Define function list_len()

In [1]:

```
def list_len(my_list):  
    if not my_list:  
        return 0  
    return 1+ list_len(my_list[1::2]) + list_len(my_list[2::2])
```

Driver code

In [7]:

```
my_list = [12,9,34,33,66,54,3]  
print("List :" , my_list)  
print("Length of List:")  
print(list_len(my_list))
```

```
List : [12, 9, 34, 33, 66, 54, 3]  
Length of List:  
7
```

In []: