

## Exp No 10 (Python)

April 13, 2024

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[1]: # Write a Program to find the length of a list using recursion in python
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[2]: #Method 01
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[3]: len = 0
def length1(a):
    global len
    if a:
        len = len + 1
        length1(a[1:])
    return len
```

```
[4]: my_list1 = [1, 2, 3, 4, 5, 6]
len1 = length1(my_list1)
print("The length of the list is:", len1)
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The length of the list is: 6

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[ ]:
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[5]: #Method 02
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[6]: def length2(a):
    if not a:
        return 0
    else:
        return 1 + length2(a[1:])
```

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[7]: my_list2 = [7,8,9,10]
len2 = length2(my_list2)
print("The length of the list is:", len2)
```

The length of the list is: 4