

## DAILY DSA | DAY-23 | Recursion – Practice| -GOPALKRISHNA A

Let's put the recursions concept into practice

### Flatten a dictionary

Given a dictionary `dict`, write a function `flattenDictionary` that returns a flattened version of it. Assume that values are either an integer, a string, or another dictionary

If a certain key is empty, it should be executed from the output

```
input: dict = {
    "Key1" : "1",
    "Key2" : {
        "a" : "2",
        "b" : "3",
        "c" : {
            "d" : "3",
            "e" : {
                "" : "1"
            }
        }
    }
}
```

Output:

```
output: {
    "Key1" : "1",
    "Key2.a" : "2",
    "Key2.b" : "3",
    "Key2.c.d" : "3",
    "Key2.c.e" : "1"
}
```

Important: When we concatenate keys, make sure to add the dot character between them. For instance, when concatenating `key2`, `c` and `d` the resulting key would be `key2.c.d`

Hint:

1. We begin by analyzing input. Can you identify a pattern?
2. The recursive approach can often work well when dealing with nested structures
3. If you find stuck while figuring out a recursive solution, consider how the keys of the dictionary can be built up with each recursive call.