

Week-8

Aim: Write a program to implement string compression?

Program:

class Solution:

```
def compress(self, chars: List[str]) -> int:
```

```
    if len(chars)==1:
```

```
        return 1
```

```
    prev_char = chars[0]
```

```
    cnt = 1
```

```
    ptr = 0
```

```
    n = len(chars)
```

```
    def modify():
```

```
        nonlocal prev_char, ptr, cnt
```

```
        chars[ptr] = prev_char
```

```
        ptr+=1
```

```
        if cnt>1:
```

```
            cnt = str(cnt)
```

```
            for j in range(len(cnt)):
```

```
                chars[ptr]=cnt[j]
```

```
                ptr+=1
```

```
        cnt = 1
```

```
        prev_char = curr_char
```

```
    for i in range(1,n):
```

```
        curr_char = chars[i]
```

```
        if curr_char==prev_char:
```

```
            cnt+=1
```

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else:

 modify()

modify()

return ptr

Output:

Accepted Runtime: 62 ms

• Case 1 • Case 2 • Case 3

Input

```
chars =  
["a","a","b","b","c","c","c"]
```

Output

```
["a","2","b","2","c","3"]
```