ANSWER NO: 01

```
inp = input()
sum = 0
s = ""
ans = []
for i in range(len(inp)):
    if inp[i] == "L":
       sum -= 1
       s += "L"
    else:
        sum += 1
        s += "R"
   if sum == 0:
        ans.append(s)
        s = ""
print(len(ans))
for i in ans:
   print(i)
```

ANSWER NO: 02

```
n = int(input())
digits = list(map(int, input().split()))
new_digits = {}

for i in range(n):
    x = digits[i]
    if x not in new_digits:
        new_digits[x] = 1
    else:
        new_digits[x] += 1
sum = 0
for x, y in new_digits.items():
```

```
if y >= x:
     sum += x
print(n - sum)
```

ANSWER NO: 03

A)

- 1. List support slicing but Dictionary does not support slicing.
- 2. In list data store with hidden index, but in Dictionary we can set random key as index and its value.
- 3. Dictionary store data pair-wise whereas, list store data singly.
- 4. List support Reverse method but Dictionary doesn't.
- 5. List data can be accessed by index, in dictionary we can accessed value by its key.

B)

*args:

- 1. When we use a parameter with one "*" asterisk sign, it will be consider as *args.
- 2. args means Arbitrary Positional Arguments.
- 3. The parameter used as args passed arguments as a tuple. So it will return as a tuple.
- 4. It is used when the parameter we pass has no fixed length or we can't determine the size of the argument.

Example:

```
def sum(*numbers):
    return numbers
numbers = [1, 2, 3, 4, 5]
print(sum(numbers))
```

This will show the output like this : (1, 2, 3, 4, 5) So *args return a tuple.

**kwargs:

- 1. When we use a parameter with double "**" asterisk sign, it will be consider as **kwargs.
- 2. **kwargs means Arbitrary Keyword Arguments.
- 3. The parameter used as args passed arguments as a dictionary. So it will return as a dictionary.
- 4. It is used when the parameter we pass has no fixed length or we can't determine the size of the argument. We pass parameter with pair-wise, like this: key = value. For this kind of arguments we need to pass the parameter in a key with value.

Example:

```
def data(**kwargs):
    return kwargs
print(data("name"= "Mofiz", "age"= 34))
```

This will return as a dictionary. The output will look like this

```
{"name": "Mofiz", "age": 34}
```

ANSWER NO: 04

```
t = int(input())
num = list(map(int, input().split()))

idx = 0
while True:
    check = filter(lambda x : x%2==0, num)
    if(len(list(check)) == t):
        num = list(map(lambda y : y//2, num))
        idx += 1
    else:
        break

print(idx)
```

ANSWER NO: 05

```
import pyautogui as py
from time import sleep

n = int(input())
sleep(5)

for i in range(1, n+1):
    py.write("#"*i)
    py.write("\n")
```