Note: Please **SUBMIT** each question individually before ending the exam to receive score.
Note: This is a monitored test.

TIME REMAINING
0:37:57

End Exam

< Previous | Balloon Decoration | ICC Champion trophy 2025 | Yet Another Chat App | eCommerce Store Design Problem | Next >

Balloon Decoration

Arbisoft is opening its new office in Germany and preparing to decorate the new office in a fun and colorful way. They used a repeating pattern of colorful balloons to make the office look amazing. These balloons came in three colors: orange, blue, and white, represented by the letters 'O', 'B', and 'W' respectively. The balloon pattern is like a magical melody that will play on a loop, giving the office a lively and enchanting aura.

Decorating a large office space was no small task. To expedite the process, Arbisoft divided the office into sections, and different teams were responsible for decorating each section. Each team had a starting point and an ending point within the office. Now, the challenge was to distribute the right number of balloons to each team based on their assigned area and the balloon pattern.

To solve this problem, Arbisoft sought the help of coding wizards like you. You will be provided with a pattern of balloons as a string like "obbwwbbo" and starting and ending index parameters specify the beginning and end points of the area each team is responsible for. Your job is to write a code that should tell us the number of balloons of each color needed for decoration within a specific range.

Input:
The input will be read from a file. The first line of the file will be the pattern. The second and third lines will be the starting and ending indexes respectively.

Output:
The output will be a lowercase string and the color order must be Blue, Orange, and then White along the number of balloons i.e. "b12o5w7".

NOTE:
The index starts from 0.
Starting & ending indexes are included.

Constraints:
The starting and ending indexes may either be equal to or fall within the range of 0 to 100,000,000.
Ending index > starting index
5 <= The length of the balloon pattern <= 15

Sample 1

Input:
```
bowbo
7
12
```

Output:
```
b2o2w2
```

Sample 2

Input:
```
owbowbob
17
48
```

Output:
```
b12o12w8
```

Sample 3

Input:

```
obbo
0
6478
```

Output:
```
b3240o3239w0
```

✔ COMPLETE

▾   **Your Response**

Your response

```python
import sys


def get_ballon(pattern: str, position: int) -> str:
    """
    Returns the ballon that should be placed at particular postion
    as per the pattern provided
    """
    ballon_index = position % len(pattern)
    return pattern[ballon_index]


def get_ballon_count(pattern: str, start_postion: int, end_postion: int) -> dict:
    """
    Stores count of all the balloons by iterating over all the postions
    """
    ballon_count = {"b": 0, "o": 0, "w": 0}
    for pos in range(start_postion, end_postion + 1):
        ballon = get_ballon(pattern, pos)
        ballon_count[ballon] += 1
    return ballon_count


def print_ballon_count(ballon_count: dict):
    """
    Prints dictionary of balloon count
    """
    for key, val in ballon_count.items():
        print(f"{key}{val}", end="")


if __name__ == "__main__":
    with open(sys.argv[1], "r") as file:
        pattern = file.readline().strip()
        start_postion = int(file.readline().strip())
        end_postion = int(file.readline().strip())
    ballon_count = get_ballon_count(pattern, start_postion, end_postion)
    print_ballon_count(ballon_count)
```

Test Case Result Breakdown

Test Cases Result: 3 / 3

Test Input	Your Output	Expected Output
owbowbob 17 48	b12o12w8	b12o12w8
obbo 0 6478	b3240o3239w0	b3240o3239w0
bowbo 7 12	b2o2w2	b2o2w2