

Editorial - Moving Balls

First Subtask

As $q_j = 1$ only one bucket is required for one color. And as $k_i = 2$ two buckets can be carried at once.

Therefore, the answer simply is $\text{int}(\text{ceil}(m/2))$ ¹

Second Subtask

Now we have to calculate the number of buckets required. As colors cannot be mixed, number of buckets required for single color is, $\text{int}(\text{ceil}(q[j]/1))$

Go through each color and calculate the number of buckets required and obtain the answer like before from the total.

Third subtask

Total number of buckets required can be found exactly like before. As $t < n$ is given, we can get each $k[i]$ simply from the array for each trip. Simulate the process of carrying balls by going through the array k and calculate how many trips needed.

Full solution

[To implement the circular nature of the array \$k\$, mod the index by the length of the array](#)