

```

public class TrickyTimeSpaceComplexityQuestions {

    public static void question1(int n) {
        for (int i = 1; i < n; i *= 2) {
            for (int j = 0; j < n; j++) {
                System.out.println(i + j);
            }
        }
    }

    public static void question2(int n) {
        ArrayList<Integer> list = new ArrayList<>();
        for (int i = 0; i < n; i++) {
            list.add(i);
        }
        System.out.println(list);
    }

    public static int question3(int n) {
        if (n <= 1) return n;
        return question3(n - 1) + question3(n - 1);
    }

    public static int question4(int n) {
        if (n == 0) return 1;
        return n * question4(n - 1);
    }

    public static void question5(int n) {
        int[] arr = new int[n];
        for (int i = 0; i < n; i++) {
            arr[i] = i * i;
        }
        System.out.println(arr);
    }
}

```