# **Product of Array Except Self**

Try to solve the Product of Array Except Self problem.



### **Statement**

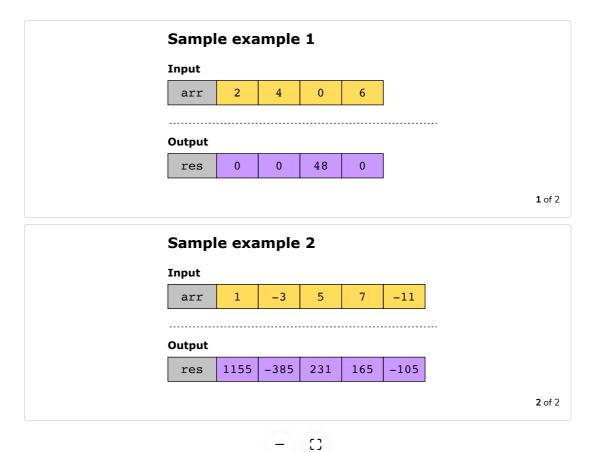
You're given an integer array, arr. Return a resultant array so that res[i] is equal to the product of all the elements of arr except arr[i].

Write an algorithm that runs in O(n) time without using the division operation.

#### **Constraints:**

- $2 < \text{arr.length} < 10^5$
- $-30 \le \operatorname{arr[i]} \le 30$
- The product of any prefix or suffix of arr is guaranteed to fit in a 32-bit integer.

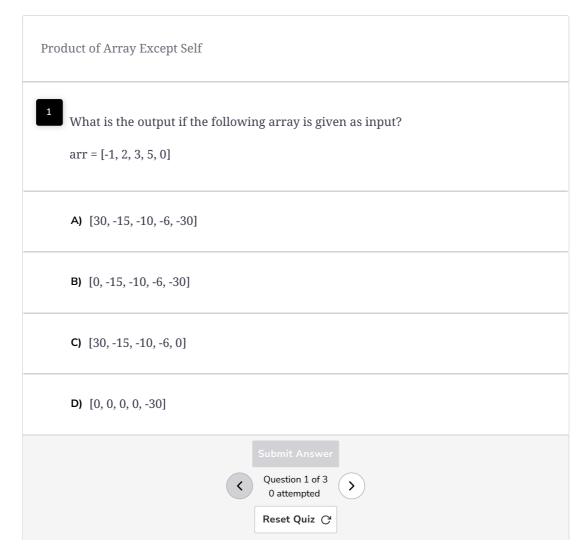
## **Examples**



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#### Onderstand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:



## Try it yourself

Implement your solution in the following coding playground:

```
👙 Java
      usercode > Product.java
          1 import java.util.*;
          2
             public class Product{
          3
                public static int[] product(int[] arr) {
>_
                   return new int[]{};
          8
          9 }
                                                                       Powered by Al
                                                                                                                   ?
                                                                                               Submit
       Test Cases
                    Results
                                                                                                                  Ττ
                                                                                                                   6
          Case 1
                    Case 2
                              Case 3
```