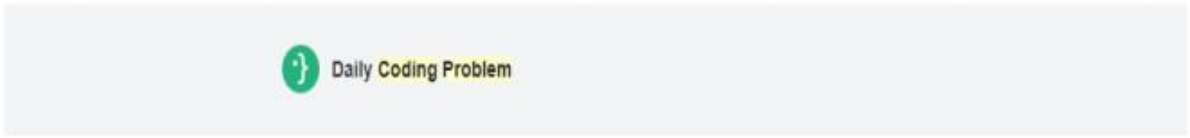

Good morning! Here's your coding interview problem for today.

This problem was asked by Uber.

Given an array of integers, return a new array such that each element at index `i` of the new array is the product of all the numbers in the original array except the one at `i`.

For example, if our input was `[1, 2, 3, 4, 5]`, the expected output would be `[120, 60, 40, 30, 24]`. If our input was `[3, 2, 1]`, the expected output would be `[2, 3, 6]`.

Follow-up: what if you can't use division?

```
public class learn {

	public static void main (String[] args)
	{
		int []numbers= new int[]{1,2,3,4,5};
		int temp =1;
		int[]newarray = new int[5];
		int original=0;

		System.out.println("Non-Dividing option");

		for (int i=0;i<numbers.length;i++)
		{
			original=numbers[i];
			numbers[i]=1;

			for (int k=0;k<numbers.length;k++)
			{

				temp=temp*numbers[k];

			}

			numbers[i]=original;


			newarray[i]= temp;
			temp=1;
			System.out.println(newarray[i]);

		}
```

```
            System.out.println("Dividing option");

            for (int i=0;i<numbers.length;i++)
            {
                  for (int k=0;k<numbers.length;k++)
                  {
                     temp=temp*numbers[k];
                  }

                  newarray[i]=temp/numbers[i];

                  temp=1;
                  System.out.println(newarray[i]);
            }

      }
}
```