LEETCODE - (152) Max Product Subarray.

→ Given an integer array nums, find subarray that has the largest product, & return the product.

[code : Java]

```
class Solution {
    public int maxProduct (int[] nums) {
        int cMax = nums[0]; → current max product.
        int cMin = nums[0]; → current min product.
        int maxProduct = nums[0]; → global maximum
        for(int i=1; i<nums.length; i++) {
            int temp = cMax;
            cMax = Math.max(nums[i], Math.max(cMax * nums[i], cMin * nums[i]));
            cMin = Math.min(nums[i], Math.min(temp * nums[i], cMin * nums[i]));
            maxProduct = Math.max(maxProduct, cMax);
        }
        return maxProduct;
    }
}
```

store previous cMax because we will update cMin first

update cMin & cMax considering nums[i]

update global max

Dry Run :- for nums = [-2, 3, -4].

Start : cMax = -2, cMin = -2, maxProduct = -2

i=1 cMax = max(3, -6, -6) = 3.
cMin = min(3, -6, -6) = -6
maxProduct = 3.

i=2 cMax = max(-4, -12, 24) = 24
cMin = min(-4, -12, -12) = -12
maxProduct = 24