**SOLUTION**

class Solution {

public:

vector<int> productExceptSelf(vector<int>& nums) {

vector<int> res(nums.size());

int rpro=1;

res[0]=1;

for(int i=1;i<nums.size();i++)

res[i]=res[i-1]\*nums[i-1];

for(int i=nums.size()-1;i>=0;i--)

{

res[i]=res[i]\*rpro;

rpro=rpro\*nums[i];

}

return res;

}

};

**TIME COMPLEXITY: O(N)**

**SPACE COMPLEXITY: O(N)**