Task 2

DATE:7/01/24

MISSING NUMBER

```
class Solution {
    public:
    int missingNumber(vector<int>& nums){
        int sumArr = 0;
        for(int i=0;i<nums.size();i++)sumArr+=nums[i];
        int n=nums.size();
        int expectedSum = (n*(n+1))/2;
        int reqNum = expectedSum - sumArr;
        return reqNum;

    }
};
```

BEST TIME TO BUY & SELL

```
class Solution {
    public int maxProfit(int[] prices) {
        int minprice = Integer.MAX_VALUE;
        int maxprofit = 0;
        for (int i = 0; i < prices.length; i++){
            if (prices[i] < minprice)
                minprice = prices[i];
            else if (prices[i]- minprice > maxprofit)
                maxprofit = prices[i] - minprices;
        }
        return maxprofit;
    }
}
```