

Missing Number

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

Best time to buy and sell stocks

```
class Solution {
public:
    int maxProfit(vector<int>& prices) {
        int Maxprofit = 0;
        int Minprice = prices[0];
        for (int i=0; i< prices.size(); i++) {
            Minprice = min(Minprice ,prices[i]);
            Maxprofit = max(Maxprofit ,prices[i] - Minprice );
        }
        return Maxprofit;
    }
};
```