

19. Given an array of integers nums, half of the integers in nums are odd, and the other half are even.

PROGRAM:

```
def count_even_odd(nums):
```

```
    even_count = 0
```

```
    odd_count = 0
```

```
    for num in nums:
```

```
        if num % 2 == 0:
```

```
            even_count += 1
```

```
        else:
```

```
            odd_count += 1
```

```
    return even_count, odd_count
```

```
nums = [1, 2, 3, 4, 5, 6]
```

```
even_count, odd_count = count_even_odd(nums)
```

```
print("Number of even integers:", even_count)
```

```
print("Number of odd integers:", odd_count)
```

```
Number of even integers: 3
Number of odd integers: 3
```

OUTPUT:

TIME COMPLEXITY:  $O(n)$