

```

public int find_min_iterative () {
    int minimum = 0; Constant O(1)
    for(int i = 0; i < arr.length; i++) { Constant O(1)
        if(arr[i] < arr[minimum]) { O(n)
            minimum = i; O(n)
        }
    }
    return minimum; Constant O(1)
}

```

Note: $n = \text{arr.length}$

$O(n)$

```

public int find_min_recursive (int index, int min) { Executed n times
    if(index == arr.length) { Constant O(1)
        return min; Constant O(1)
    }
    if(arr[index] < arr[min]) { Constant O(1)
        min = index; Constant O(1)
    }

    return find_min_recursive(index + 1, min); O(1)
}

```

Note: $5n$

```

public int find_min_recursive() {
    return find_min_recursive(1, 0); Constant O(1)
}

```

Note: $5n+1$