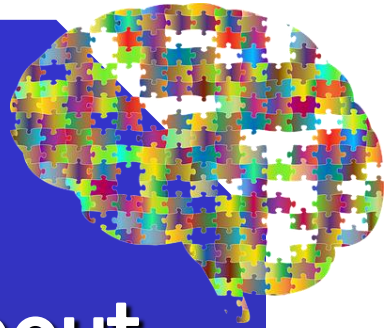
Algorithm

Bubble Sort

Time Complexity

Bubble Sort



Let's think about...
Best Case

Bubble Sort

Best Case

Already Sorted

```
[1, 2, 3, 6, 8]
```

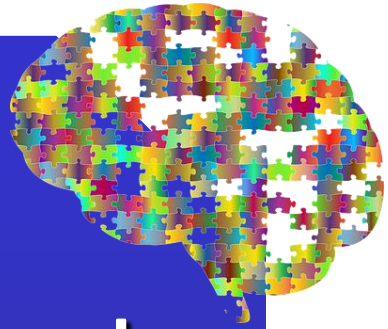
Bubble Sort

How many comparisons?

```
[1, 2, 3, 6, 8]
```

Best-Case Time Complexity

O(n)

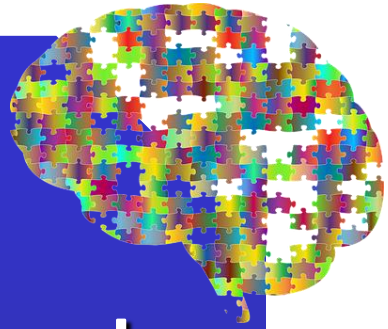


Let's think about... Average Case

Bubble Sort

Average Case

```
[1, 2, 8, 3, 4]
```



Let's think about... Worst Case

Bubble Sort

Worst Case

```
[8, 6, 3, 2, 1]
```

Bubble Sort

Average-Case & Worst-Case Time Complexities

O(n*n)

Bubble Sort

Average-Case & Worst-Case Time Complexities

O(n^2)

Time to Practice!