

What is an algorithm?

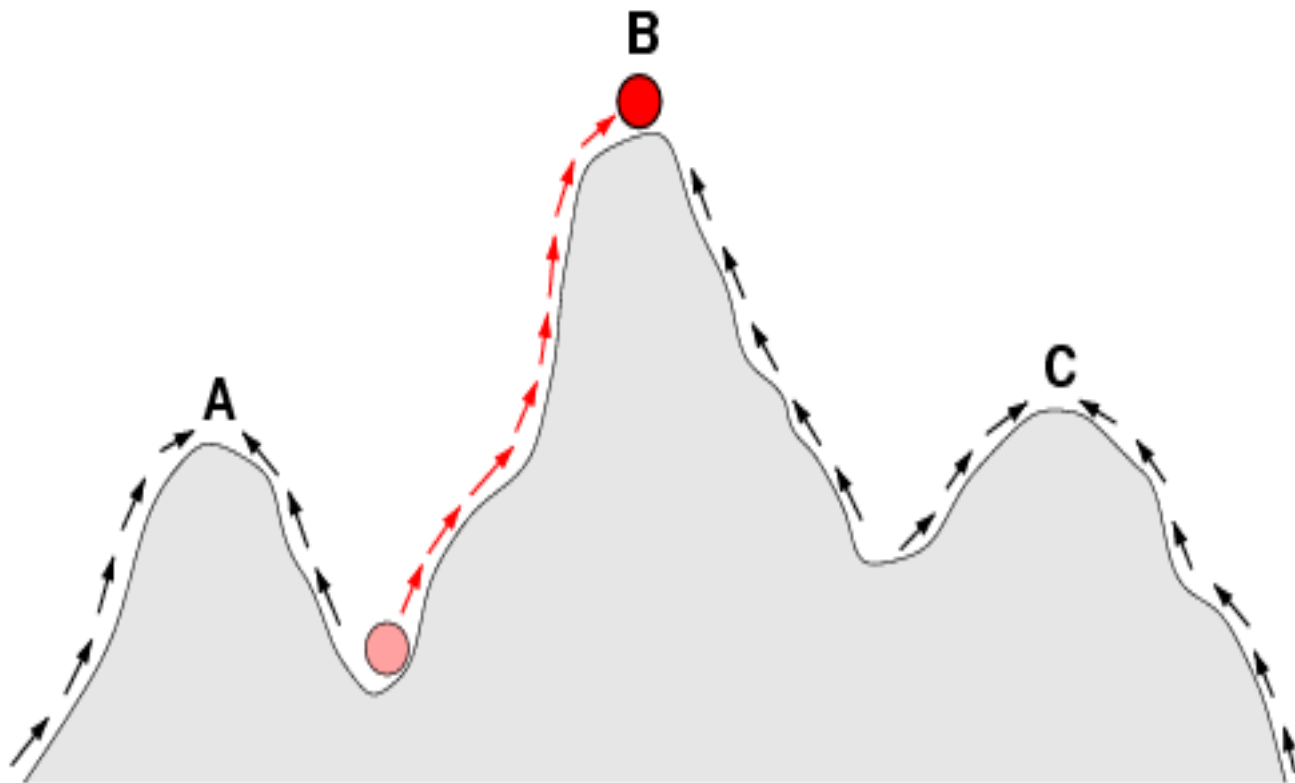
Steven Salzberg

1. Preheat oven to 350 F.
2. Melt 1 cup chocolate chips and 1 stick butter in a microwave
3. Cool; stir in 3 large eggs.
4. Stir in 1¼ cups flour, 1 cup sugar, 1 tsp vanilla, ¼ tsp baking soda, 1 more cup chocolate chips.
5. Spread in 13x9-inch baking pan.
6. Bake for 18-22 minutes.



algorithms don't need computers

How to find a maximum



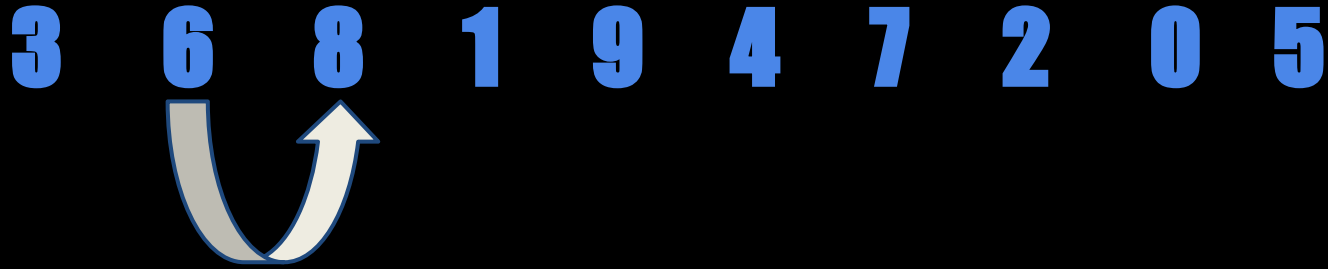
Sorting

6 3 8 1 9 4 7 2 0 5

Sorting

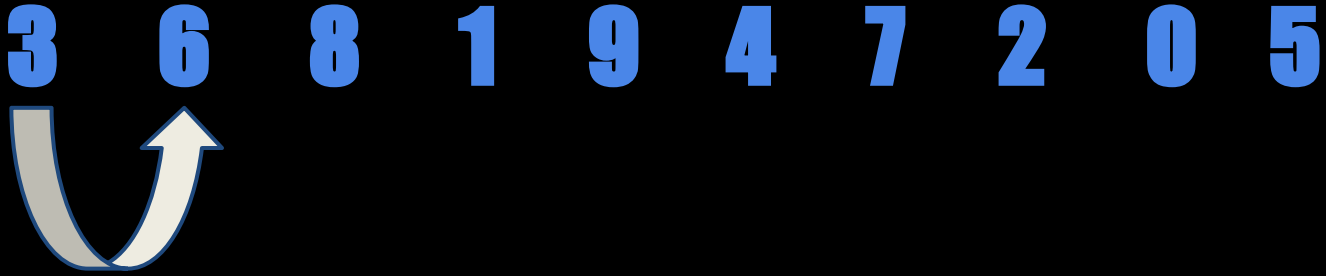


Sorting



already sorted, so go back...

Sorting



Sorting

3 6 8 1 9 4 7 2 0 5



Sorting



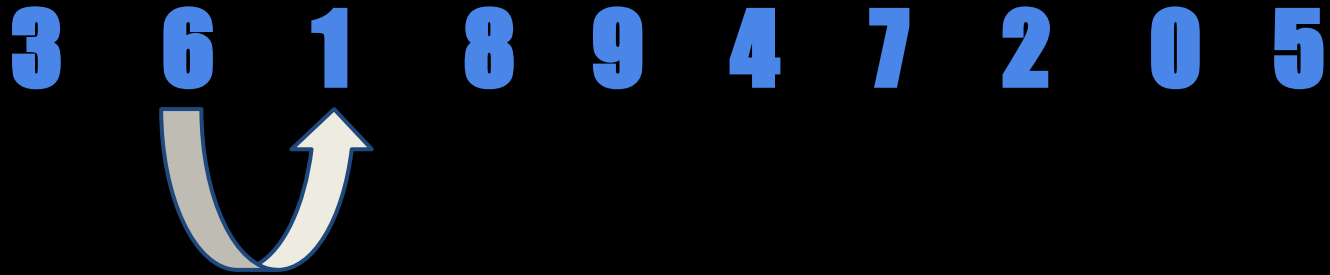
Sorting

3 6 1 8 9 4 7 2 0 5

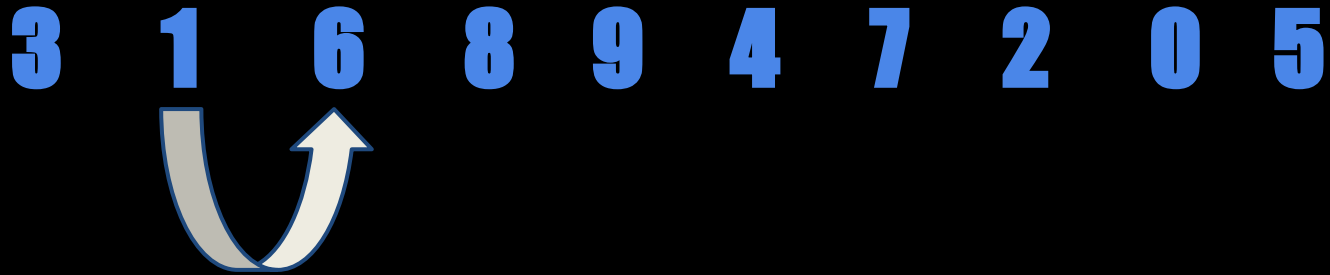


already sorted, so go back...

Sorting



Sorting



Sorting... until eventually

0 1 2 3 4 5 6 7 8 9

Efficient algorithms

