

All Jumbled Up

Hello from Abstractopia!

Ready to dive into loads of lists? Here at Abstractopia, Alon will guide you through the different ways computers use lists to solve problems.



Lots of lists!

To-do lists, packing lists, and bucket lists are just a few examples of lists we use every day! Just like these examples, **lists** in computer science are also used to **store information in an organized way**.

What are indexes?

Each item in a list is ordered with numbers called **indexes**. By assigning each item to an index (a number), it becomes easier to search and sort through the list.

Geography Time!

Let's explore indexes further with a Geography lesson from Alon:

How we've been counting:



We count **starting from the number 1**. Here are the planets in our galaxy listed from largest to smallest. Abstractopia's index is 1, and Logicland's index is 4.

Planet Size List

1. Abstractopia
2. Decomposphere
3. Algorithmopoly
4. Logicland
5. Patteron
6. Evaluatus

How computers count:



Computers count **starting from the number 0**. As a result, each planet's index shifts down by 1. Now, Abstractopia's index is 0, and Logicland's index is 3.

Planet Size List

0. Abstractopia
1. Decomposphere
2. Algorithmopoly
3. Logicland
4. Patteron
5. Evaluatus

All Jumbled Up: Bicycle Fun!

At Abstractopia, Alon's loves sharing stories with his friends. But sometimes he forgets the order of events, and accidentally jumbles up the story. Can you help Alon unscramble his story to match each event with their correct indexes?

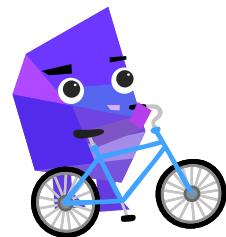
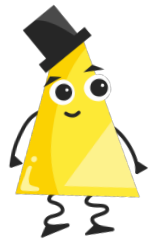
Directions

If you read the Alon's Bicycle Fun story below, the lines seem to be out of place, and the story doesn't make a whole lot of sense. It looks like the events have been mixed up and out of order. Reorder the indexes of each sentence to un-jumble the story.

In your 'My Storyline List' on the next page, help Alon reorder his story to make logical sense. Happy un-jumbling!

Alon's Bicycle Fun

1. Alon rides his bicycle around the park with Lex.
2. Alon walks to the Abstractopia Bike Park.
3. Whew! Alon finally returns back home for lunch.
4. Alon arrives at the park and meets his friend Lex.
5. Alon walks back home, forgetting about his bike.
6. Alon ties his shoes and takes his bicycle.
7. Alon heads back to the Abstractopia Bike Park.
8. Alon picks up his bike and walks back home.
9. Alon wakes up in the morning.
10. Uh-oh! Alon realizes he left his bike at the park.



My Unjumbled Story

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____