

1. Create a list of 5 colors.
Print the **third item**.
2. Given `nums = [10, 20, 30, 40]`, change the **second element to 25**.
3. Add "orange" to the end of the list:
`fruits = ["apple", "banana", "cherry"]`
4. Insert "grape" at index 1 in:
`fruits = ["apple", "banana", "cherry"]`
5. Remove "banana" from the list:
`fruits = ["apple", "banana", "cherry"]`
6. Use a **for loop** to print each element of this list:
`languages = ["Python", "Java", "C++"]`
7. Write a program to **sort** the list of numbers in ascending order:
`numbers = [5, 1, 8, 3, 2]`
8. Copy the list `a = [1, 2, 3]` into a new list `b` and modify `b[1] = 99`.
Print both lists.
9. Join two lists:
`x = ["red", "green"]` and `y = ["blue", "yellow"]`
Use `+` operator or `extend()` method.
10. Given a list:
`items = [10, 20, 30, 40, 50]`
Remove the **last item** using `pop()`.
11. Write a program to **count how many times** "cat" appears in this list:
`animals = ["dog", "cat", "cat", "bird", "cat"]`
12. Check if "mango" is present in this list using **membership operator (in)**:
`fruits = ["apple", "banana", "cherry"]`
13. Write a function to **return only even numbers** from a given list.
14. Reverse a list using **slicing** and print it.
Example: `nums = [1, 2, 3, 4, 5]`
15. Use list comprehension to create a list of **squares** from 1 to 10.
16. Remove **all duplicates** from this list:
`a = [1, 2, 2, 3, 4, 4, 5]`
17. Use a loop to print all items with their **index number**
(e.g., 0: apple, 1: banana, etc.)
18. Merge these two lists without using `+` or `extend()`:
`a = [1, 2]`, `b = [3, 4]` using a loop.
19. Find the **maximum and minimum values** in a list of numbers using `max()` and `min()`.
20. Clear all elements from a list using a method.

