

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.

