

# Object

1. Create an object representing a car with properties: make, model, and year. Access and log each property.
2. Create a nested object to represent a person with properties: name and address (which should also be an object with street and city).
3. Create an object for a book with properties: title, author, and pages. Modify the number of pages.
4. Create an object to represent a movie, then add a property for the release year.
5. Create an object with at least 5 properties. Use ``Object.keys()`` to get and log all the keys.
6. Write a function that takes an object and returns an array of keys where the value is a number.
7. Create an object with different data types as values. Use ``Object.keys()`` to log only the string values.
8. Given an object, log the number of keys it has using ``Object.keys()``.
9. Create an object with properties and use ``Object.values()`` to log the values.
10. Write a function that takes an object and returns the sum of all its numeric values using ``Object.values()``.
11. Create an object with mixed types, then filter out and log only the boolean values using ``Object.values()``.
12. Create a user object and log all the values in a formatted string.

13. Use ``Object.entries()`` to log both keys and values of an object in the format "key: value".
14. Write a function that takes an object and returns an array of strings formatted as "key: value".
15. Create an object with properties and log only those entries where the value is a string using ``Object.entries()``.
16. Given an object, log the number of key-value pairs it has using ``Object.entries()``.
17. Create an object and check if it has a specific property using ``Object.hasOwnProperty()``.
18. Write a function that checks if all properties of an object are present and returns true or false using ``Object.hasOwnProperty()``.
19. Create an object for a student and check for properties: name and grade.
20. Write a function that takes an object and a property name, returning true if the property exists.
21. Create two objects and merge them into a third using ``Object.assign()``.
22. Write a function that takes two objects and returns a new object with properties from both.
23. Create an object representing a user, then use ``Object.assign()`` to add new properties.
24. Use ``Object.assign()`` to clone an object and modify a property in the clone.
25. Create an object and freeze it using ``Object.freeze()``. Attempt to modify a property and log the result.

26. Write a function that accepts an object and uses ``Object.freeze()`` to prevent any modifications.
27. Create a frozen object and log an error message when trying to add a new property.
28. Test if an object is frozen using ``Object.isFrozen()``.
29. Create an object with at least 10 properties and write a function to count the number of properties of type `'string'`.
30. Write a function that takes an object and returns a new object with keys converted to uppercase.
31. Create a function that checks if any value in an object is an array using ``Object.values()``.
32. Write a function that takes an object and returns an object with all numeric values squared.
33. Use ``Object.keys()``, ``Object.values()``, and ``Object.entries()`` to log an object in a tabular format.
34. Write a function that accepts an object and uses all four methods (``keys``, ``values``, ``entries``, ``hasOwnProperty``) to summarize the object.
35. Create an object and log all keys and their corresponding types using ``Object.entries()``.
36. Write a function that combines two objects and logs the conflicting keys and their values.
37. Create a function that accepts an object and a key, returning an error message if the key does not exist.

38. Write a function that ensures a property exists on an object before trying to access it, using ``hasOwnProperty()``.
39. Create an object with a method. Ensure the method checks if ``this`` refers to the correct object.
40. Use ``Object.freeze()`` on a configuration object and test its immutability.
41. Create a character object for a game and log its properties using ``Object.entries()``.
42. Write a function that takes an object and returns an array of keys sorted alphabetically.
43. Create a fruit object and add a method to log a summary of its properties.
44. Use ``Object.assign()`` to extend a settings object with defaults.
45. Create an employee object, add a method to calculate salary, and log the result.
46. Create a shopping cart object and use methods to add and remove items.
47. Create a settings object and use ``Object.freeze()`` to lock it down after initial setup.
48. Build a simple library system with books as objects and methods to add and remove books.
49. Create an object representing a recipe with properties for ingredients and instructions, then log it.
50. Write a function that accepts an array of objects and returns a new array of objects with only the specified keys.