

Some problems on map and filter

1. Given a list of strings, use map to convert each string to uppercase.
2. Given a list of numbers, use filter to find all multiples of 3.
3. Given a list of strings, use filter to find all the strings that have more than 5 characters.
4. Given a list of tuples (name, age), use map and filter to find the names of people who are above 18 years old.
5. Given a list of dictionaries representing people (each dictionary contains keys 'name' and 'age'), use filter to find all the people whose age is above 30.
6. Given a list of strings, use map to convert each string to its length.
7. Given a list of integers, use filter to find all the numbers which are one less than some prime numbers.
8. Given a list of dictionaries representing products (each dictionary contains keys 'name' and 'price'), use filter to find all the products with a price less than \$10.
9. Given a list of strings, use filter to find all the strings that start with the letter 'A'.
10. Given a list of numbers, use map to calculate the cubes of the even numbers within the list of numbers.
11. Given a list of tuples (name, score), use map and filter to find the names of students who have scored above 80.
12. Given a list of strings, use map to reverse each string.
13. Given a list of integers, use filter to find all the numbers that are divisible by 7 and 9.
14. Given a list of dictionaries representing books (each dictionary contains keys 'title' and 'author'), use map to extract the titles of the books.
15. Given a list of strings, use filter to find all the strings that contain the letter 'e'.
16. Given a list of tuples (name, salary), use filter to find all the employees whose salary is above the average salary.