List Comprehension

List Comprehension Basic 1

1. Create a list of even numbers from 1 to 20.
2. Generate a list of squares for odd numbers between 1 and 15.
3. Create a list of numbers between 1 and 30 that are divisible by 3.
4. Filter only positive numbers from the list `[-10, -5, 0, 5, 10]`.
5. Create a list of words longer than 4 characters from `["apple", "pie", "banana", "pear"]`.
6. Select words that start with "S" from `["Sun", "moon", "star", "sky"]`.
7. Filter out strings with only digits from `["hello", "123", "world", "456"]`.
8. Create a list of uppercase letters in `"Hello World!"`.
9. Create a list of numbers from 1 to 100 that end in 5.
10. Filter palindromic words from `["madam", "apple", "civic", "level"]`.
11. Create a list of multiples of 5 from 1 to 50.
12. Remove words containing vowels from `["sky", "fly", "why", "try"]`.
13. Filter strings that are alphanumeric from `["Hello", "123!", "world", "@test"]`.
14. List perfect squares under 100.
15. Select words with an even number of characters from `["cat", "elephant", "dog", "horse"]`.
16. Create a list of words containing the letter "e" from `["tree", "rock", "water", "sun"]`.
17. Generate a list of prime numbers from 1 to 50.
18. Select words that are fully uppercase from `["HELLO", "world", "PYTHON", "code"]`.
19. Create a list of numbers from 1 to 100 that are divisible by 7.
20. Filter words ending in "ing" from `["running", "jog", "swimming", "dancing"]`.

21. Select negative numbers from `[-10, 5, -3, 2, -7]`.
22. Create a list of lowercase letters from `"Python Programming!"`.
23. Select words containing the letter "a" from `["apple", "banana", "grape", "kiwi"]`.
24. Create a list of words with odd lengths from `["python", "java", "c++", "ruby"]`.
25. Filter positive even numbers from `[-4, -2, 0, 2, 4, 6]`.
26. Create a list of odd numbers from 1 to 50 that are divisible by 5.
27. Filter words ending in "ly" from `["quickly", "slow", "happily", "fast"]`.
28. Create a list of non-empty strings from `["apple", "", "banana", " ", "cherry"]`.
29. Filter strings with only special characters from `["@#$", "123", "abc!", "#!"]`.
30. Create a list of uppercase vowels from `"HELLO World!"`.
31. Filter strings containing digits from `["abc", "a1b", "def", "g3h"]`.
32. Select words longer than 5 characters from `["hello", "world", "Python", "rocks"]`.
33. Create a list of strings ending in "s" from `["dogs", "cat", "lions", "tiger"]`.
34. Filter out strings with only non-digit characters from `["123", "abc", "45a", "bcd"]`.
35. Generate squares of positive numbers from `[-3, -2, -1, 0, 1, 2, 3]`.
36. Filter words containing the letter "i" from `["hi", "hello", "in", "out"]`.
37. Create a list of numbers up to 100 that are multiples of both 4 and 6.
38. Filter numbers from 1 to 200 that are divisible by 11.
39. Select strings with no spaces from `["hello world", "no_space", "python code"]`.
40. Create a list of odd numbers from 1 to 100 that end in 3.
41. Select words containing both uppercase and lowercase letters from `["Hello", "WORLD", "python", "Code"]`.
42. Create a list of numbers up to 200 that are divisible by 13 but not by 7.
43. Select words starting and ending with the same letter from `["eye", "apple", "level", "banana"]`.

44. Filter words with an odd length greater than 5 from `["hello", "goodbye", "evening", "night"]`.
45. Select words that contain the letter "z" from `["jazz", "buzz", "fizz", "hello"]`.
46. Create a list of numbers from `[2, 4, 6, 8, 10]` that are less than the average of the list.
47. Generate double the value of even numbers from `range(1, 20)`.
48. Filter strings containing no vowels from `["sky", "try", "bye", "fly"]`.
49. Create a list of odd prime numbers under 50.
50. Filter positive numbers that are not multiples of 3 from `[-3, -2, 0, 1, 4, 6, 9]`.