List Comprehension with If-Else Condition

numbers = range(1, 11)

result = [x\*\*2 if x % 2 == 0 else x\*\*3 for x in numbers]

# Output: [1, 4, 27, 16, 125, 36, 343, 64, 729, 100]

print(result)

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even\_numbers = [x for x in range (11) if x % 2 == 0]

print(even\_numbers) # Output: [0, 2, 4, 6, 8, 10]

squares = [x\*\*2 for x in range(11) if x > 5]

print(squares) # Output: [36, 49, 64, 81, 100]

words = ["apple", "bee", "cat", "dog", "elephant"]

x= [word.upper() for word in words if len(word) > 3]

print(x) # Output: ['APPLE', 'ELEPHANT']

Example: List of numbers from 0 to 20 that are both even and greater than 10

numbers = [x for x in range(21) if x % 2 == 0 and x > 10]

print(numbers) # Output: [12, 14, 16, 18, 20]

words = ["apple", "bee", "cat", "dog", "elephant"]

filtered\_words = [word.upper() for word in words if len(word) > 3 and 'e' in word]

print(filtered\_words) # Output: ['APPLE', 'ELEPHANT']

converting List with tuples to dictionary

x = [("Alice", 85), ("Bob", 90), ("Charlie", 78), ("Diana", 92)]

y = dict(x)

print(y) # Output: {'Alice': 85, 'Bob': 90, 'Charlie': 78, 'Diana': 92}

y={k:v for k,v in x}

print(y)