Exercise 3

In [6]:
integers = [x for x in range(1, 11)]
integers

Out[6]:
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

In [8]:
squared_integers = [x ** 2 for x in integers]
squared_integers

Out[8]:
[1, 4, 9, 16, 25, 36, 49, 64, 81, 100]

In [11]:
odd_squared_integers = [x for x in squared_integers if x % 2 != 0]
odd_squared_integers

Out[11]:
[1, 9, 25, 49, 81]

In [1]:
[x for x in range(100, 401) if all([int(d) % 2 == 0 for d in str(x)])]
Out[1]: [200, 202, 204, 206, 208, 220, 222, 224, 226, 228, 240, 242, 244, 246, 248, 260, 262, 264, 266, 268, 280, 282, 284, 286, 288, 400]