**Puzzles 1**

def get\_larger( num1 : float, num2: float)-> float:

    """

    returns larger number

    >>> get\_larger(3,5)

    num2 bigger

    5

    >>> get\_larger(6.9,5)

    num1 bigger

    6.9

    "

    """

    if num1 > num2:

        print("num1 bigger")

        return num1

    elif num2 > num1:

        print("num2 bigger")

        return num2

    else:

        print("numbers are the same")

        return 0

**Puzzle 2**

1. **for i in range(10):**
   * Output: 0 1 2 3 4 5 6 7 8 9
   * Explanation: range(10) generates numbers from 0 to 9.
2. **for i in range(2, 10):**
   * Output: 2 3 4 5 6 7 8 9
   * Explanation: range(2, 10) generates numbers from 2 to 9.
3. **for i in range(10, 2):**
   * Output: (No output)
   * Explanation: range(10, 2) is invalid because the start value is greater than the stop value, and the default step is +1. No numbers are generated.
4. **for i in range(2, 10, 1):**
   * Output: 2 3 4 5 6 7 8 9
   * Explanation: range(2, 10, 1) generates numbers from 2 to 9 with a step of 1.
5. **for i in range(2, 10, 3):**
   * Output: 2 5 8
   * Explanation: range(2, 10, 3) generates numbers starting at 2, incrementing by 3, and stopping before 10.
6. **for i in range(10, 2, -2):**
   * Output: 10 8 6 4
   * Explanation: range(10, 2, -2) generates numbers starting at 10, decrementing by 2, and stopping before 2.

**Puzzle 3**

1

2

3

4

The while loop starts when x = 0, but **before print(x) happens, x += 1 increments x to 1**. Since print(x) happens **after** the increment, 0 is never printed. This pattern continues until x == 5, where break stops the loop before printing 5.

**Puzzle 4**

x = 0

while x < 10:

    #x+= 1

    if x == 5:

        x += 1

        continue

    print(x)

    x+=1

This increases x by I in the if statement before continuing

**Puzzle 5**

The code will be in the loop forever