**Q1**. Write a function to get the intersection of two lists.

For example, if A = [1, 2, 3, 4, 5], and B = [0, 1, 3, 7] then you should return [1, 3].

**Q2**. Given a number *n*, write a formula that returns 𝑛!*n*!.

In case you forgot the factorial formula, 𝑛!=𝑛∗(𝑛−1)∗(𝑛−2)∗.....2∗1*n*!=*n*∗(*n*−1)∗(*n*−2)∗.....2∗1.

For example, 5!=5∗4∗3∗2∗1=1205!=5∗4∗3∗2∗1=120 so we'd return 120.

Assume is 𝑛 is a non-negative integer.

**Q3**. Write a function fizz\_buzz\_sum to find the sum of all multiples of 3 or 5 below a target value.

For example, if the target value was 10, the multiples of 3 or 5 below 8 are 3, 5, 6, and 9.

Because 3+5+6+9=23, our function would return 23.

**Q4**. Given an list of integers called input, return True if any value appears at least twice in the array. Return False if every element in the input list is distinct.

For example, if the input list was [1,3,5,7,1], then return True because the number 1 shows up twice.

However, if the input was [1,3,5,7] then return False, because every element of the list is distinct.

**Q5**. Given an input list containing *n* distinct numbers in the range 0 to *n*, return the only number in the range that is missing from the list.

For example, given input = [0,1,3], return 2. Because the input list has 3 elements in it, we expect to see the numbers 0 to 3 in there, but 2 is missing.

Another example: given input = [4, 3, 2, 1], return 0. We return 0 becuase the input list has 4 elements in it, so we expect to see the numbers 0 to 4 in there, but 0 itself is missing!