1. Write a function that calculates the area and perimeter of circles. The function should take one parameter: a list. This list will contain the radius of each circle. Your job is to save all the areas in one list, and perimeters in another list, then return a nested list that contains the area list and parameter list.

**Given function call 1:**

print(function\_name([1, 2, 3]))

**Output 1:**

[[3.1416, 12.5664, 28.2744], [6.2832, 12.5664, 18.8496]]

**Explanation 1:**

The radii of the circles are 1, 2 and respectively. The areas of the circles (calculated using pi \* r^2 ) are 3.1416, 12.5664, 28.2744 respectively. The perimeters of the circles (calculated using 2 \* pi \* r) are 6.2832, 12.5664, 18.8496 respectively.

**Given function call 2:**

print(function\_name([6]))

**Output 2:**

[[113.0976], [37.6992]]

**Explanation 2:**

The radius of the circle is 6. The area of the circles (calculated using pi \* r^2 ) is 113.0976. The perimeter of the circle (calculated using 2 \* pi \* r) are 37.6992.

1. Generate the output of the following code:

| 1 | **myList = [0, 1, 0, 4, 0, 0,6, 7]** |
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| 2 | **b = []** |
| 3 | **index1 = 3** |
| 4 | **index2 = 0** |
| 5 | **b = myList** |
| 6 | **while (index1 < 8):** |
| 7 | **myList[index1] = index1 + 1** |
| 8 | **index2 = 5** |
| 9 | **while (index2 < index1):** |
| 10 | **myList[index1] = myList[index2+1] - index1** |
| 11 | **index2 = index2 + 1** |
| 12 | **print(myList[index1])** |
| 13 | **index1 = index1 + 1** |

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