1. Write a function which receives an array and a number as arguments and returns a new array from the elements of the given array which are larger than the given number.

|  |  |
| --- | --- |
| **Input** | **Output** |
| [10, 25, 16, -5, 30, 15, 24] , 16 | [25, 30, 24] |
| [1, 1, 2, -3, 0, 8, 4, 0], 9 | “Such values do not exist.” |

2. Write a function, which receives two numbers as arguments and finds all numbers between them such that each digit of the number is even. The numbers obtained should be printed in a comma-separated sequence on a single line.

|  |  |
| --- | --- |
| **Input** | **Output** |
| 19, 42 | “20, 22, 24, 26, 28, 40, 42” |
| 99, 199 | “Such numbers does not exist.” |

3. Write a recursive function to determine whether all digits of the number are odd or not.

|  |  |
| --- | --- |
| **Input** | **Output** |
| 4211133 | false |
| 7791 | true |
| 5 | true |

4. Given an array of numbers. Write a recursive function to find its minimal positive element. (if such element does not exist, return -1)․

|  |  |
| --- | --- |
| **Input** | **Output** |
| [56, -9, 87, -23, 0, -105, 55, 1] | 0 |
| [45, -9, 15, 5, -78] | 5 |
| [-5, -9, -111, -1000, -7] | -1 |

5. Given an array of numbers which is almost sorted in ascending order.  Find the index where sorting order is violated.

|  |  |
| --- | --- |
| **Input** | **Output** |
| [2, 12, 15, 48, 64] | -1 |
| [-9, -4, -4, 3, 12, 4, 5] | 5 |

6. Review all previous lessons