

Important instruction:

- Handwritten solution will not be allowed. You need to code.
- Partial marking is available. So, try to perform as much as you can.
- you will get 2 hours in total
- Use of loop is not allowed, you need to solve recursively.

Problem 1:

Write a recursive function that takes an odd number **n** as argument, and calculate the result of the following series:

$$1^2 - 3^2 + 5^2 - 7^2 + \dots n^2$$

Problem 2:

Write a recursive function that takes an octal (integer) number as argument, and convert it into decimal.

Problem no.	Points
1	10
2	10