## Subnet calculator – python team task

In this task you will have to implement a subnetting calculator.

You may use only **python built-ins and python standard library** (anything you can import without installing)

## Your program should follow all the structural/modularity programing principles

## Input:

- 1. IP number
  - Valid ip number should be given (verify hint: regex)
- 2. Subnet mask in CIDR (optional if not given the subnet will be inferred from the class)
  - Verify that an integer legit valid number was input
- 3. Will the partitioning be according to number of hosts or number of subnets
  - Verify the input
- 4. Number of hosts/subnets (according to previous question)
  - Verify that an integer legit valid number was input

## Output:

- 1. Subnet mask (in mask decimal format)
- 2. Subnet in CIDR
- 3. Number of hosts
- 4. Number of subnets
- 5. For (maximum) two first and two last subnets
  - a. Network address
  - b. Broadcast address