1.
Write a calculator using basic mathematical operations that includes:
* addition
* subtraction
* multiplication
* division
* square root
* logarithm
You can use the numpy package. The calculator should allow for operations on both numbers and lists. Then, perform tests for each programmed mathematical operation. Try to find an example where the result of the operation should be correct, but the test does not succeed.

2.
Transform the implementation of the calculator into an object-oriented form. Then, perform tests for this class and all implemented operations. Each test should be programmed in a parametric form.

3.
Use a ready-made library (other than numpy) to verify its correctness using the PyTest library. Tests should be performed in both classical and parametric form. Investigate at least 5 different methods from the library.