A web application has to be written, which returns the denomination of the amount in Euro for a given amount on a web interface. The largest possible notes or coins should always be taken first, so that as few notes and coins as possible are needed.

After the computation took place once, is to be indicated with the next computation, how the denomination changed to the previous expenditure.

Example

new amount: 234.23€
old amount: 45.32€

New	
denomination	234.23 €

Notes / Coins	Quantity
200.00	1
20.00	1
10.00	1
2.00	2
0.20	1
0.02	1
0.01	1

Notes / Coins	Differenz
200.00	+1
20.00	-1
10.00	+1
5.00	-1
2.00	+2
0.20	0
0.10	-1
0.02	0
0.01	+1

45.32€

Difference to

The calculation part of the application should be executed either in the frontend or in the backend. This should be switchable via the interface.

For the frontend Angular greater than version 18 should be used. In the backend, please use Java on any web framework (Java EE, Spring Boot or similar).

Please send us the source code for all components at least 3 days before a presentation.

For the denomination, we assume that the following notes and coins exist. All figures in €.

Notes /	Coins
	200.00
	100.00
	50.00
	20.00
	10.00
	5.00
	2.00
	1.00
	0.50
	0.20
	0.10
	0.05
	0.02
	0.01