Yura Duda / Newton

Function: newton('100*((y-x^2)^2) + 5 * ((1-x)^2) ',[0,0],['x','y'])
@home:~$ F'
[200 * (0 - 2 * x) * (y - x ^ 2) - 10 * (1 - x),200 * (y - x ^ 2)]
@home:~$ Hesse
| 200 * (0 - 2 * x) ^ 2 - 400 * (y - x ^ 2) + 10 | | 200 * (0 - 2 * x) |
| 200 * (0 - 2 * x) | | 200 |
@home:~$ Iteration
$ = Hesse(0)
| 10 | | 0 |
| 0 | | 200 |
$ = Inverse Hesse(0)
| 0.1 | | 0 |
| 0 | | 0.005 |
$ = x0
[0,0]
$ = Hesse(1)
| 1210 | | -400 |
| -400 | | 200 |
$ = Inverse Hesse(1)
| 0.00243902439024390 3 | | 0.004878048780487806 |
| 0.004878048780487806 | | 0.01475609756097561 2 |
$ = x1
[1,0]
$ = Hesse(2)
| 810 | | -400 |
| -400 | | 200 |
$ = Inverse Hesse(2)
| 0.09999999999999984 | | 0.19999999999999968 |
| 0.19999999999999968 | | 0.40499999999999936 |
$ = x2
[1,1]
@home:~$ Result
[1,1]
