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1 /Users/nico/PycharmProject/DeepLearning/hw2/venv/  
  bin/python /Applications/PyCharm.app/Contents/  
  plugins/python/helpers/pydev/pydevconsole.py --mode  
  =client --port=61518  
2  
3 import sys; print('Python %s on %s' % (sys.version  
  , sys.platform))  
4 sys.path.extend(['Users/nico/PycharmProject/  
  DeepLearning/hw2'])  
5  
6 PyDev console: starting.  
7  
8 Python 3.8.0 (v3.8.0:fa919fdf25, Oct 14 2019, 10:23  
  :27)  
9 [Clang 6.0 (clang-600.0.57)] on darwin  
10 >>> runfile('/Users/nico/PycharmProject/  
  DeepLearning/hw2/problem1.py', wdir='/Users/nico/  
  PycharmProject/DeepLearning/hw2')  
11 The result of Node 1: 8.000000  
12  
13 The result of Node 2: -0.145500  
14  
15 The result of Node 3: 3.000000  
16  
17 The result of Node 4: 0.141120  
18  
19 The result of Node 6: 0.019915  
20  
21 The result of Node 6: -0.125585  
22  
23 The result of Node 7: 1.874415  
24  
25 The result of the Graph: 0.533500  
26  
27  
28 Backward Propagation  
29  
30 The result of Node 8: -0.284622  
31  
32 The result of Node 7: -0.284622  
33
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34 The result of Node 6: -0.284622
35
36 The result of Node 5: -0.080332
37
38 The result of Node 4: 0.079528
39
40 Backward differential output at Node 3 position 1
  output with respect to x1: 0.238583
41
42 Backward differential output at Node 3 position 2
  output with respect to w1: 3.000000
43
44 Backward differential output at Node 2: 0.281593
45
46 Backward differential output at Node 1 with respect
  to x2: 1.126373
47
48 Backward differential output at Node 1 with respect
  to w2: 0.563186
49
50 The Result of the partial differentiation with
  respect to x1: 0.238583
51
52 The Result of the partial differentiation with
  respect to w1: 3.000000
53
54 The Result of the partial differentiation with
  respect to x2: 1.126373
55
56 The Result of the partial differentiation with
  respect to w2: 0.563186
57
58
```