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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=61526
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/problem2.py', wdir='/Users/nico/
  PycharmProject/DeepLearning/hw2')
11 The Result of Node 1:
12 [[2]
13  [1]
14  [2]]
15 The Result of Node 2:
16 [[0.88079708]
17  [0.73105858]
18  [0.88079708]]
19 The Result of the Computational Graph is:
20 2.0860536305372746
21 Backward Propagation
22
23 The Result of the Node 3:
24 2.0860536305372746
25 The Result of Node 2:
26 [[0.88079708]
27  [0.73105858]
28  [0.88079708]]
29 The back ward differentiation output at Node 1 at
  position 1 result partial diff of output W :
30 [[0.18495609 0.          0.18495609]
31  [0.28746968 0.          0.28746968]
32  [0.18495609 0.          0.18495609]]
```

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33 The back ward differentiation output at Node 1 at  
    position 2 result partial diff of output X:  
34  [[0.36991217]  
35  [0.28746968]  
36  [0.65738185]]  
37
```