## Exercise set 5: Neural networks Ossi Koski

```
Layer (type)
                         Output Shape
                                                Param #
flatten (Flatten)
                         (None, 12288)
dense (Dense)
                         (None, 100)
                                                1228900
dense_1 (Dense)
                         (None, 100)
                                                10100
dense_2 (Dense)
                         (None, 1)
                                                101
Total params: 1,239,101
rainable params: 1,239,101
Non-trainable params: 0
poch 1/10
17/17 [====
Epoch 2/10
          17/17 [==========================] - 0s 6ms/step - loss: 0.2567 - accuracy: 0.9127
Epoch 3/10
17/17 [====
                    ========] - 0s 7ms/step - loss: 0.1699 - accuracy: 0.9507
Epoch 4/10
17/17 [====================] - 0s 6ms/step - loss: 0.1144 - accuracy: 0.9924
Epoch 5/10
                   =========] - 0s 7ms/step - loss: 0.0954 - accuracy: 0.9962
17/17 [====
Epoch 6/10
17/17 [=====
Epoch 7/10
                =========] - 0s 7ms/step - loss: 0.0836 - accuracy: 0.9943
17/17 [====
                  :==========] - 0s 6ms/step - loss: 0.0702 - accuracy: 0.9981
Epoch 8/10
                  ========] - 0s 6ms/step - loss: 0.0579 - accuracy: 1.0000
17/17 [=====
Epoch 9/10
.
17/17 [=====
                    Epoch 10/10
                 ==========] - 0s 6ms/step - loss: 0.0458 - accuracy: 0.9981
17/17 [======
```

```
Accuracy: 1.0
5/5 - 0s - loss: 0.0383 - accuracy: 1.0000 - 147ms/epoch - 29ms/step
```