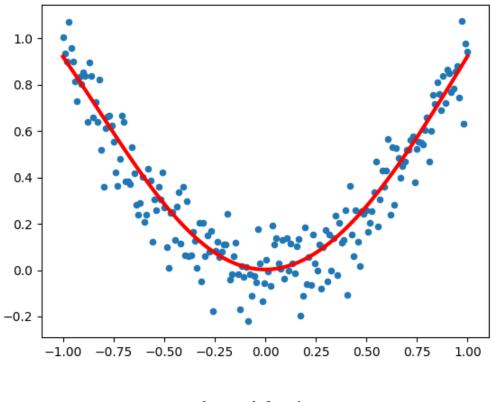
Report



data_and_function

I follow the instructions and hints to complete the functions, then test my code by running toy_example_regressor.py, prime_classifier.py and evaluate_assignment.py, then fix the problem and test my code again.

Toy:

[Epoch 0]: loss: 11.849840680207045

[Epoch 0]: loss: 6.415041388570392

[Epoch 0]: loss: 3.2045493964415552

[Epoch 50]: loss: 0.08639302372940084

[Epoch 50]: loss: 0.06355492087682417

[Epoch 50]: loss: 0.10430830250754455

- [Epoch 100]: loss: 0.0667864986274947
- [Epoch 100]: loss: 0.043070342402683266
- [Epoch 100]: loss: 0.07336165251287292
- [Epoch 150]: loss: 0.058024677774894944
- [Epoch 150]: loss: 0.03501619889368944
- [Epoch 150]: loss: 0.05945252714791631
- [Epoch 200]: loss: 0.05015711709868256
- [Epoch 200]: loss: 0.0291554545756946
- [Epoch 200]: loss: 0.05007075093495725
- [Epoch 250]: loss: 0.042617746830282154
- [Epoch 250]: loss: 0.02415525989724089
- [Epoch 250]: loss: 0.04253706011446123
- [Epoch 300]: loss: 0.03585074147278868
- [Epoch 300]: loss: 0.019992677375035926
- [Epoch 300]: loss: 0.03626870717954512
- [Epoch 350]: loss: 0.030126536711588357
- [Epoch 350]: loss: 0.016711992078656167
- [Epoch 350]: loss: 0.03113406771250146
- [Epoch 400]: loss: 0.02549545618901762
- [Epoch 400]: loss: 0.014268265884217932
- [Epoch 400]: loss: 0.027049655917991123
- [Epoch 450]: loss: 0.021873288891892752
- [Epoch 450]: loss: 0.012547788294916581
- [Epoch 450]: loss: 0.02389634611342621
- [Epoch 500]: loss: 0.01911211153806263
- [Epoch 500]: loss: 0.011406532030974512
- [Epoch 500]: loss: 0.021524380151930256
- [Epoch 550]: loss: 0.017046724026484963

[Epoch 550]: loss: 0.01070009800911031

[Epoch 550]: loss: 0.01977676853518588

[Epoch 600]: loss: 0.015521602593686588

[Epoch 600]: loss: 0.010301524807819254

[Epoch 600]: loss: 0.018508520399747173

[Epoch 650]: loss: 0.01440376231539285

[Epoch 650]: loss: 0.010108810777512606

[Epoch 650]: loss: 0.01759690772700774

[Epoch 700]: loss: 0.013586451521400483

[Epoch 700]: loss: 0.01004544743300226

[Epoch 700]: loss: 0.0169443067865402

[Epoch 750]: loss: 0.012987649335143785

[Epoch 750]: loss: 0.010057251985814728

[Epoch 750]: loss: 0.01647648951766266

[Epoch 800]: loss: 0.012546277972433077

[Epoch 800]: loss: 0.010107806902074088

[Epoch 800]: loss: 0.016138861647197238

[Epoch 850]: loss: 0.012217840730803536

[Epoch 850]: loss: 0.01017386559008349

[Epoch 850]: loss: 0.01589226800834974

[Epoch 900]: loss: 0.011970390642428712

[Epoch 900]: loss: 0.01024147445393219

[Epoch 900]: loss: 0.01570909960403362

[Epoch 950]: loss: 0.011781199604152755

[Epoch 950]: loss: 0.010302929658207116

[Epoch 950]: loss: 0.015570140226694493

Validation Loss 0.01128530784036602

Prime:

[Epoch 0]:	validation loss: 0.20135027,	validation accuracy: 69.36%
[Epoch 1]:	validation loss: 0.11589750,	validation accuracy: 85.96%
[Epoch 2]:	validation loss: 0.09951013,	validation accuracy: 87.46%
[Epoch 3]:	validation loss: 0.09272672,	validation accuracy: 88.22%
[Epoch 4]:	validation loss: 0.08894021,	validation accuracy: 88.76%
[Epoch 5]:	validation loss: 0.08646042,	validation accuracy: 89.03%
[Epoch 6]:	validation loss: 0.08460486,	validation accuracy: 89.33%
[Epoch 7]:	validation loss: 0.08283331,	validation accuracy: 89.45%
[Epoch 8]:	validation loss: 0.08034576,	validation accuracy: 89.83%
[Epoch 9]:	validation loss: 0.07701915,	validation accuracy: 90.26%
[Epoch 10]:	validation loss: 0.07336158,	validation accuracy: 90.82%
[Epoch 11]:	validation loss: 0.06953909,	validation accuracy: 91.49%
[Epoch 12]:	validation loss: 0.06556480,	validation accuracy: 92.03%
[Epoch 13]:	validation loss: 0.06145956,	validation accuracy: 92.71%
[Epoch 14]:	validation loss: 0.05736161,	validation accuracy: 93.29%
[Epoch 15]:	validation loss: 0.05348172,	validation accuracy: 93.83%
[Epoch 16]:	validation loss: 0.05002990,	validation accuracy: 94.34%
[Epoch 17]:	validation loss: 0.04706440,	validation accuracy: 94.62%
[Epoch 18]:	validation loss: 0.04454474,	validation accuracy: 94.83%
[Epoch 19]:	validation loss: 0.04240104,	validation accuracy: 95.09%
[Epoch 20]:	validation loss: 0.04056526,	validation accuracy: 95.27%
[Epoch 21]:	validation loss: 0.03898068,	validation accuracy: 95.49%
[Epoch 22]:	validation loss: 0.03760219,	validation accuracy: 95.70%
[Epoch 23]:	validation loss: 0.03639403,	validation accuracy: 95.88%
[Epoch 24]:	validation loss: 0.03532722,	validation accuracy: 95.97%
[Epoch 25]:	validation loss: 0.03437793,	validation accuracy: 96.06%
[Epoch 26]:	validation loss: 0.03352654,	validation accuracy: 96.10%

[Epoch 27]:	validation loss: 0.03275712,	validation accuracy: 96.23%
[Epoch 28]:	validation loss: 0.03205689,	validation accuracy: 96.30%
[Epoch 29]:	validation loss: 0.03141567,	validation accuracy: 96.38%
[Epoch 30]:	validation loss: 0.03082534,	validation accuracy: 96.43%
[Epoch 31]:	validation loss: 0.03027935,	validation accuracy: 96.48%
[Epoch 32]:	validation loss: 0.02977239,	validation accuracy: 96.54%
[Epoch 33]:	validation loss: 0.02930009,	validation accuracy: 96.61%
[Epoch 34]:	validation loss: 0.02885878,	validation accuracy: 96.62%
[Epoch 35]:	validation loss: 0.02844536,	validation accuracy: 96.64%
[Epoch 36]:	validation loss: 0.02805717,	validation accuracy: 96.65%
[Epoch 37]:	validation loss: 0.02769191,	validation accuracy: 96.73%
[Epoch 38]:	validation loss: 0.02734757,	validation accuracy: 96.76%
[Epoch 39]:	validation loss: 0.02702238,	validation accuracy: 96.81%
[Epoch 40]:	validation loss: 0.02671475,	validation accuracy: 96.81%
[Epoch 41]:	validation loss: 0.02642328,	validation accuracy: 96.86%
[Epoch 42]:	validation loss: 0.02614671,	validation accuracy: 96.89%
[Epoch 43]:	validation loss: 0.02588390,	validation accuracy: 96.97%
[Epoch 44]:	validation loss: 0.02563382,	validation accuracy: 96.99%
[Epoch 45]:	validation loss: 0.02539553,	validation accuracy: 97.04%
[Epoch 46]:	validation loss: 0.02516819,	validation accuracy: 97.05%
[Epoch 47]:	validation loss: 0.02495103,	validation accuracy: 97.08%
[Epoch 48]:	validation loss: 0.02474334,	validation accuracy: 97.11%
[Epoch 49]:	validation loss: 0.02454448,	validation accuracy: 97.12%