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# Generate Faces

REVIEW

CODE REVIEW

HISTORY

## ▼ problem\_unittests.py

```
1 from unittest.mock import MagicMock, patch
2 import numpy as np
3 import torch
4
5
6 def _print_success_message():
7     print('Tests Passed')
8
9
10 class AssertTest(object):
11     def __init__(self, params):
12         self.assert_param_message = '\n'.join([str(k) + ': ' + str(v) + ' ' for k, v in params.items()])
13
14     def test(self, assert_condition, assert_message):
15         assert assert_condition, assert_message + '\n\nUnit Test Function Parameters:\n' + self.assert_param_message
16
17
18 def test_discriminator(Discriminator):
19     batch_size = 50
20     conv_dim=10
21     D = Discriminator(conv_dim)
22
23     # create random image input
24     x = torch.from_numpy(np.random.randint(1, size=(batch_size, 3, 32, 32))*2 -1).float()
25
26     train_on_gpu = torch.cuda.is_available()
27     if train_on_gpu:
```

```

28     x.cuda()
29
30     output = D(x)
31     assert_test = AssertTest({
32         'Conv Dim': conv_dim,
33         'Batch Size': batch_size,
34         'Input': x})
35
36     correct_output_size = (batch_size, 1)
37     assert_condition = output.size() == correct_output_size
38     assert_message = 'Wrong output size. Expected type {}. Got type {}'.format(correct_output_size, output.size())
39     assert_test.test(assert_condition, assert_message)
40
41     _print_success_message()
42
43 def test_generator(Generator):
44     batch_size = 50
45     z_size = 25
46     conv_dim=10
47     G = Generator(z_size, conv_dim)
48
49     # create random input
50     z = np.random.uniform(-1, 1, size=(batch_size, z_size))
51     z = torch.from_numpy(z).float()
52
53     train_on_gpu = torch.cuda.is_available()
54     if train_on_gpu:
55         z.cuda()
56     #b = torch.LongTensor(a)
57     #nn_input = torch.autograd.Variable(b)
58
59     output = G(z)
60     assert_test = AssertTest({
61         'Z size': z_size,
62         'Conv Dim': conv_dim,
63         'Batch Size': batch_size,
64         'Input': z})
65
66     correct_output_size = (batch_size, 3, 32, 32)
67     assert_condition = output.size() == correct_output_size
68     assert_message = 'Wrong output size. Expected type {}. Got type {}'.format(correct_output_size, output.size())
69     assert_test.test(assert_condition, assert_message)
70
71     _print_success_message()
72

```

RETURN TO PATH