Ref1. conv\_out = torch.ones((1,1,2048))

# map dim 2048 to 1 using a Linear transformation.

fc = nn.Linear(2048,1)

fc\_out = fc(conv\_out)

# apply sigmoid function to fc\_out to get the probability.

y\_prob = torch.sigmoid(fc\_out)

print(y\_prob)

Ref2. x = F.relu(self.fc4(x))

# To prevent overfitting

x = self.fc5(x)

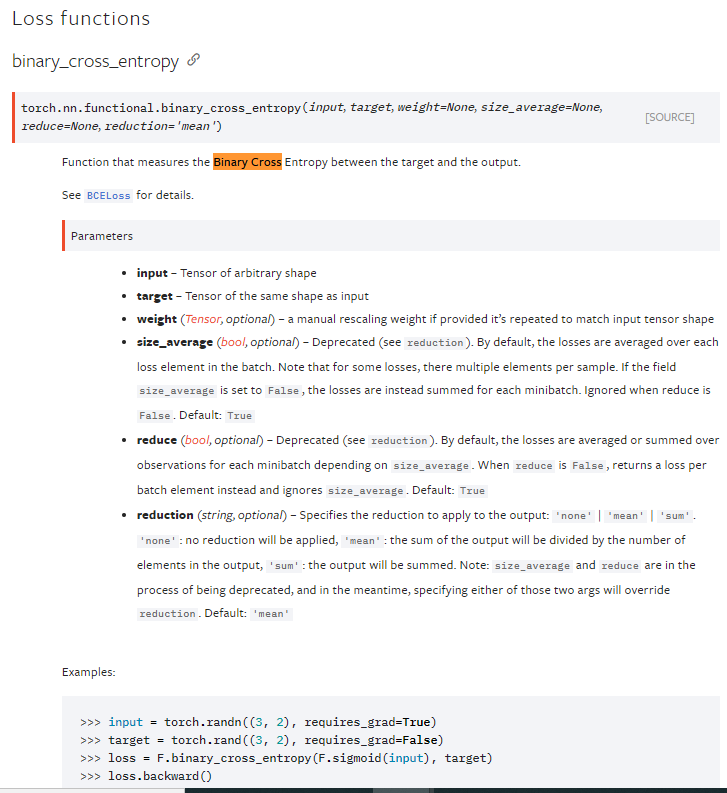
return x

-> 마지막에 Linear 함수의 output 에 아무런 Activation function을 씌우지 않았는데 여기에 Sigmoid output을 씌우면 됨??

-> 그리고 Criterion으로 Binary\_cross\_entropy를 이용해야 함

Pytorch module 링크를 찾아보면

Ref3. <https://pytorch.org/docs/stable/nn.functional.html>



>>> input **=** torch**.**randn((3, 2), requires\_grad**=True**)

>>> target **=** torch**.**rand((3, 2), requires\_grad**=False**)

>>> loss **=** F**.**binary\_cross\_entropy(F**.**sigmoid(input), target)

>>> loss**.**backward()