Dimensionality Reduction

- Two common dimensionality reduction techniques are PCA and auto-encoders. Those techniques are sensitive to scale, so it is important to standardize the data and make it unitless. For this purpose, cell viability and gene expression features are standardized with standard scaler. For evaluating information loss in different dimensionality reduction techniques, latent space dimensions are set to half of cell viability and gene expression dimensions.

PCA

- PCA is a linear transformation that projects the data into another space, where vectors of projections are defined by variance of the data. PCA results can be evaluated with reconstruction error and cumulative percent variance.

Auto-encoder

- Auto-encoders are neural networks used for reducing data into a low dimensional latent space. Most important features lie in this low dimensional latent space because they are capable of reconstructing it. Auto-encoders are slower and computationally expensive compared to PCA, and they are also prone to overfitting.

In [1]:

```
!pip3 install iterative-stratification
```

```
Collecting iterative-stratification
  Downloading https://files.pythonhosted.org/packages/9d/79/9ba64c8c07b07b
8b45d80725b2ebd7b7884701c1da34f70d4749f7b45f9a/iterative_stratification-0.
1.6-py3-none-any.whl
Requirement already satisfied: scikit-learn in /usr/local/lib/python3.7/di
st-packages (from iterative-stratification) (0.22.2.post1)
Requirement already satisfied: numpy in /usr/local/lib/python3.7/dist-pack
ages (from iterative-stratification) (1.19.5)
Requirement already satisfied: scipy in /usr/local/lib/python3.7/dist-pack
ages (from iterative-stratification) (1.4.1)
Requirement already satisfied: joblib>=0.11 in /usr/local/lib/python3.7/di
st-packages (from scikit-learn->iterative-stratification) (1.0.1)
Installing collected packages: iterative-stratification
Successfully installed iterative-stratification-0.1.6
```

In [2]:

```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.model_selection import train_test_split
from sklearn.model_selection import StratifiedKFold, KFold
from sklearn import preprocessing
from sklearn.metrics import confusion_matrix, mean_squared_error
import tensorflow as tf
from tensorflow.keras import layers,regularizers,Sequential,backend,callbacks,optimizers,metrics, Model,losses
from iterstrat.ml_stratifiers import MultilabelStratifiedKFold
from sklearn.decomposition import PCA
```

In [3]:

```python
# Importing data

train_features = pd.read_csv('/content/train_features.csv')
non_ctrl_val = train_features.loc[train_features['cp_type']!='ctl_vehicle'].index.to_list()
train_features = train_features.drop(['sig_id','cp_type'],axis=1)
train_targets_scored = pd.read_csv('/content/train_targets_scored.csv')
train_targets_scored = train_targets_scored.drop('sig_id',axis=1)
train_label = train_targets_scored.values

# Droping of training data with ctl_vehicle

train_features = train_features.iloc[non_ctrl_val]
train_label = train_label[non_ctrl_val]

# Importing test data

test_features = pd.read_csv('/content/test_features.csv')
test_features = test_features.drop(['sig_id'],axis=1)
```

In [4]:

```python
# Label Encoding for categorical feature "cp_dose"

categorical = 'cp_dose'
le = preprocessing.LabelEncoder()
le.fit(train_features[categorical])
train_features[categorical] = le.transform(train_features[categorical])

# Transform categorical

test_features[categorical] = le.transform(test_features[categorical])
```

In [5]:

```python
# Quantile Transformer for gene and cell features

scaler = preprocessing.QuantileTransformer(output_distribution='normal')

# Scaling of train data
data_train = scaler.fit_transform(train_features.iloc[:,2:])

# Scaling of test data
data_test = scaler.transform(test_features.drop('cp_type',axis=1).iloc[:,2:])

# Standard Scaling for Dose/Time

scaler = preprocessing.StandardScaler()

# Concatinating train & test feature

data_train =  np.concatenate((scaler.fit_transform(train_features.iloc[:,:2]),data_train),axis=1)
data_test =  np.concatenate((scaler.transform(test_features.drop('cp_type',axis=1).iloc[:,:2]),data_test),axis=1)
```

In [6]:

```python
n_features = data_train.shape[1]
n_labels = train_label.shape[1]
n_train = data_train.shape[0]
n_test = data_test.shape[0]
```

```python
# Autoencoder to create compressed features

# Cells feature i.e. 'c-'

c_f = train_features.columns.str.contains('c-')
cells_train = data_train[:,c_f]
cells_test = data_test[:,c_f]
dim_encd = 256
act = 'relu'
noise = 0.15
dropout = 0.1
class Autoencoder(Model):
    def __init__(self, num_inp, dim_encd):
        super(Autoencoder, self).__init__()
        # encoder function
        self.encoder = Sequential([
            layers.BatchNormalization(),
            layers.Dropout(noise),
            layers.Dense(0.5*dim_encd,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(0.75*dim_encd,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(dim_encd,activation=act),
        ])
        # decoder function
        self.decoder = Sequential([
            layers.Dense(0.75*dim_encd,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(0.5*dim_encd,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(num_inp)
        ])

    def call(self, x):
        encoded = self.encoder(x)
        decoded = self.decoder(encoded)
        return decoded

cell_auto_encd = Autoencoder(c_f.sum(),dim_encd)
cell_auto_encd.compile(optimizer=optimizers.Adam(learning_rate=1E-5), loss='mse')
ae_reduce_lr = callbacks.ReduceLROnPlateau(monitor='val_loss', factor=0.5, patience=5,
min_lr=1E-5)
ae_early_stopping = callbacks.EarlyStopping(monitor='val_loss', min_delta=1E-5, patienc
e=16, restore_best_weights=True)
def scheduler(epoch,lr):
    if epoch%32<17:
        lr += (0.3*1E-2)/16
    else:
        lr -= (0.3*1E-2)/16
    return lr

lr_scheduler = callbacks.LearningRateScheduler(scheduler)
hist = cell_auto_encd.fit(cells_train,cells_train,batch_size=128, verbose=1,
                      validation_data = (cells_test,cells_test), epochs=256,
                      shuffle=True, callbacks=[ae_early_stopping,lr_scheduler])
```

```python
cell_auto_encd.compile(optimizer=optimizers.Adam(learning_rate=5*1E-5), loss='mse')

cell_auto_encd.fit(cells_train,cells_train,batch_size=128, verbose=1,
                   validation_data = (cells_test,cells_test), epochs=256,
                   shuffle=True, callbacks=[ae_early_stopping,ae_reduce_lr])
cell_auto_encd.save('cell_fet_auto_encd')
```

```
Epoch 1/256
172/172 [==============================] - 6s 8ms/step - loss: 1.5707 - va
l_loss: 0.5953
Epoch 2/256
172/172 [==============================] - 1s 5ms/step - loss: 0.7109 - va
l_loss: 0.5181
Epoch 3/256
172/172 [==============================] - 1s 5ms/step - loss: 0.6398 - va
l_loss: 0.4759
Epoch 4/256
172/172 [==============================] - 1s 5ms/step - loss: 0.5815 - va
l_loss: 0.4366
Epoch 5/256
172/172 [==============================] - 1s 5ms/step - loss: 0.5279 - va
l_loss: 0.4067
Epoch 6/256
172/172 [==============================] - 1s 5ms/step - loss: 0.4794 - va
l_loss: 0.3383
Epoch 7/256
172/172 [==============================] - 1s 5ms/step - loss: 0.4385 - va
l_loss: 0.2986
Epoch 8/256
172/172 [==============================] - 1s 5ms/step - loss: 0.4035 - va
l_loss: 0.2620
Epoch 9/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3799 - va
l_loss: 0.2369
Epoch 10/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3638 - va
l_loss: 0.2570
Epoch 11/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3471 - va
l_loss: 0.2100
Epoch 12/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3356 - va
l_loss: 0.2120
Epoch 13/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3264 - va
l_loss: 0.2011
Epoch 14/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3256 - va
l_loss: 0.1888
Epoch 15/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3204 - va
l_loss: 0.1818
Epoch 16/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3271 - va
l_loss: 0.2017
Epoch 17/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3188 - va
l_loss: 0.1713
Epoch 18/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3098 - va
l_loss: 0.1811
Epoch 19/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3105 - va
l_loss: 0.1685
Epoch 20/256
172/172 [==============================] - 1s 5ms/step - loss: 0.3052 - va
l_loss: 0.1754
Epoch 21/256
```

```
172/172 [==============================] - 1s 5ms/step - loss: 0.2984 - va
l_loss: 0.1779
Epoch 22/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2965 - va
l_loss: 0.1714
Epoch 23/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2965 - va
l_loss: 0.1600
Epoch 24/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2958 - va
l_loss: 0.1574
Epoch 25/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2921 - va
l_loss: 0.1525
Epoch 26/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2883 - va
l_loss: 0.1537
Epoch 27/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2883 - va
l_loss: 0.1532
Epoch 28/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2831 - va
l_loss: 0.1515
Epoch 29/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2816 - va
l_loss: 0.1518
Epoch 30/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2819 - va
l_loss: 0.1468
Epoch 31/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2791 - va
l_loss: 0.1443
Epoch 32/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2774 - va
l_loss: 0.1420
Epoch 33/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2770 - va
l_loss: 0.1421
Epoch 34/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2776 - va
l_loss: 0.1466
Epoch 35/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2795 - va
l_loss: 0.1451
Epoch 36/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2828 - va
l_loss: 0.1490
Epoch 37/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2914 - va
l_loss: 0.1671
Epoch 38/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2880 - va
l_loss: 0.1536
Epoch 39/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2845 - va
l_loss: 0.1514
Epoch 40/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2896 - va
l_loss: 0.1623
Epoch 41/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2870 - va
```

```
l_loss: 0.1618
Epoch 42/256
172/172 [==============================] - 1s 6ms/step - loss: 0.2909 - va
l_loss: 0.1686
Epoch 43/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2975 - va
l_loss: 0.1619
Epoch 44/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2934 - va
l_loss: 0.1598
Epoch 45/256
172/172 [==============================] - 1s 6ms/step - loss: 0.2945 - va
l_loss: 0.1606
Epoch 46/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2947 - va
l_loss: 0.1563
Epoch 47/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2898 - va
l_loss: 0.1648
Epoch 48/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2948 - va
l_loss: 0.2011
Epoch 1/256
172/172 [==============================] - 2s 6ms/step - loss: 0.2754 - va
l_loss: 0.1382
Epoch 2/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2755 - va
l_loss: 0.1378
Epoch 3/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2755 - va
l_loss: 0.1372
Epoch 4/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2750 - va
l_loss: 0.1375
Epoch 5/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2740 - va
l_loss: 0.1373
Epoch 6/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2727 - va
l_loss: 0.1374
Epoch 7/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2748 - va
l_loss: 0.1370
Epoch 8/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2729 - va
l_loss: 0.1370
Epoch 9/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2703 - va
l_loss: 0.1374
Epoch 10/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2721 - va
l_loss: 0.1374
Epoch 11/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2719 - va
l_loss: 0.1368
Epoch 12/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2724 - va
l_loss: 0.1375
Epoch 13/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2728 - va
l_loss: 0.1367
```

```
Epoch 14/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2741 - va
l_loss: 0.1370
Epoch 15/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2739 - va
l_loss: 0.1365
Epoch 16/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2733 - va
l_loss: 0.1368
Epoch 17/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2727 - va
l_loss: 0.1373
Epoch 18/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2730 - va
l_loss: 0.1369
Epoch 19/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2718 - va
l_loss: 0.1375
Epoch 20/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2740 - va
l_loss: 0.1368
Epoch 21/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2724 - va
l_loss: 0.1364
Epoch 22/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2735 - va
l_loss: 0.1362
Epoch 23/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2773 - va
l_loss: 0.1367
Epoch 24/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2734 - va
l_loss: 0.1365
Epoch 25/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2707 - va
l_loss: 0.1369
Epoch 26/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2707 - va
l_loss: 0.1365
Epoch 27/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2721 - va
l_loss: 0.1366
Epoch 28/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2725 - va
l_loss: 0.1361
Epoch 29/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2708 - va
l_loss: 0.1366
Epoch 30/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2717 - va
l_loss: 0.1368
Epoch 31/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2738 - va
l_loss: 0.1360
Epoch 32/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2724 - va
l_loss: 0.1362
Epoch 33/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2710 - va
l_loss: 0.1361
Epoch 34/256
```

```
172/172 [==============================] - 1s 5ms/step - loss: 0.2704 - va
l_loss: 0.1364
Epoch 35/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2721 - va
l_loss: 0.1369
Epoch 36/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2714 - va
l_loss: 0.1365
Epoch 37/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2741 - va
l_loss: 0.1364
Epoch 38/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2709 - va
l_loss: 0.1364
Epoch 39/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2726 - va
l_loss: 0.1363
Epoch 40/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2744 - va
l_loss: 0.1363
Epoch 41/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2728 - va
l_loss: 0.1362
Epoch 42/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2708 - va
l_loss: 0.1362
Epoch 43/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2725 - va
l_loss: 0.1362
Epoch 44/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2702 - va
l_loss: 0.1362
Epoch 45/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2719 - va
l_loss: 0.1364
Epoch 46/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2714 - va
l_loss: 0.1362
Epoch 47/256
172/172 [==============================] - 1s 5ms/step - loss: 0.2710 - va
l_loss: 0.1361
INFO:tensorflow:Assets written to: CellsAE/assets
```

In [8]:

```
plt.figure(figsize=(12,8))
plt.plot(hist.history['loss'])
plt.plot(hist.history['val_loss'])
plt.yscale('log')
plt.xlabel('Epochs')
plt.ylabel('Average Logloss')
plt.legend(['Training','Validation'])
```

Out[8]:

<matplotlib.legend.Legend at 0x7f82c7185450>
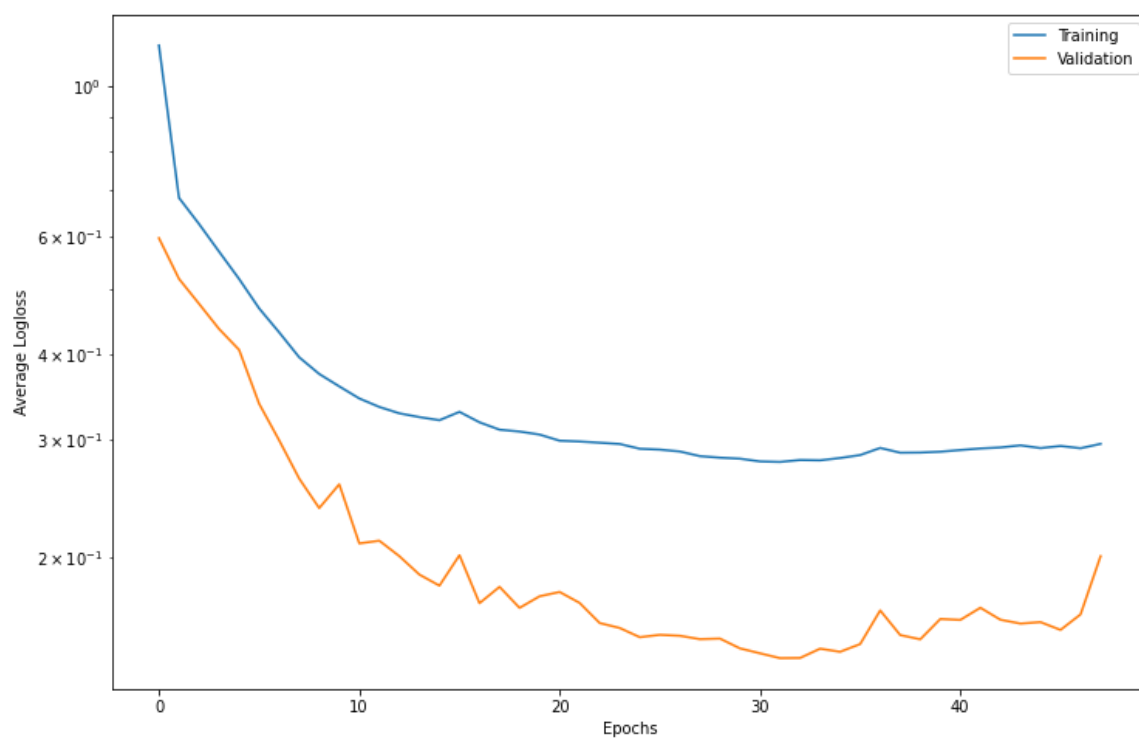
```python
# Genes feature i.e. 'g-'
g_f = train_features.columns.str.contains('g-')
genes_train = data_train[:,g_f]
genes_test = data_test[:,g_f]
dim_enc = 1600
act = 'relu'
noise = 0.15
dropout = 0.1
class Autoencoder(Model):
    def __init__(self, num_inp, dim_enc):
        super(Autoencoder, self).__init__()
        # encoder function
        self.encoder = Sequential([
            layers.BatchNormalization(),
            layers.Dropout(noise),
            layers.Dense(0.5*dim_enc,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(0.75*dim_enc,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(dim_enc,activation=act),
        ])
        # decoder function
        self.decoder = Sequential([
            layers.Dense(0.75*dim_enc,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(0.5*dim_enc,activation=act),
            layers.BatchNormalization(),
            layers.Dropout(dropout),
            layers.Dense(num_inp)
        ])

    def call(self, x):
        encoded = self.encoder(x)
        decoded = self.decoder(encoded)
        return decoded

gene_auto_encd = Autoencoder(g_f.sum(),dim_enc)
gene_auto_encd.compile(optimizer=optimizers.Adam(learning_rate=1E-5), loss='mse')
ae_reduce_lr = callbacks.ReduceLROnPlateau(monitor='val_loss', factor=0.5, patience=5,
min_lr=1E-5)
ae_early_stopping = callbacks.EarlyStopping(monitor='val_loss', min_delta=1E-5, patienc
e=16, restore_best_weights=True)

hist = gene_auto_encd.fit(genes_train,genes_train,batch_size=128, verbose=1,
                    validation_data = (genes_test,genes_test), epochs=256,
                    shuffle=True, callbacks=[ae_early_stopping,lr_scheduler])

gene_auto_encd.compile(optimizer=optimizers.Adam(learning_rate=5*1E-5), loss='mse')
gene_auto_encd.fit(genes_train,genes_train,batch_size=128, verbose=1,
                validation_data = (genes_test,genes_test), epochs=256,
                shuffle=True, callbacks=[ae_early_stopping])
gene_auto_encd.save('gene_fet_auto_encd')
```

```
Epoch 1/256
172/172 [==============================] - 3s 8ms/step - loss: 1.2206 - va
l_loss: 0.6467
Epoch 2/256
172/172 [==============================] - 1s 7ms/step - loss: 0.7519 - va
l_loss: 0.5632
Epoch 3/256
172/172 [==============================] - 1s 7ms/step - loss: 0.6639 - va
l_loss: 0.5065
Epoch 4/256
172/172 [==============================] - 1s 6ms/step - loss: 0.5962 - va
l_loss: 0.4649
Epoch 5/256
172/172 [==============================] - 1s 6ms/step - loss: 0.5406 - va
l_loss: 0.4332
Epoch 6/256
172/172 [==============================] - 1s 7ms/step - loss: 0.4978 - va
l_loss: 0.4161
Epoch 7/256
172/172 [==============================] - 1s 6ms/step - loss: 0.4589 - va
l_loss: 0.3864
Epoch 8/256
172/172 [==============================] - 1s 7ms/step - loss: 0.4321 - va
l_loss: 0.3836
Epoch 9/256
172/172 [==============================] - 1s 7ms/step - loss: 0.4163 - va
l_loss: 0.3546
Epoch 10/256
172/172 [==============================] - 1s 7ms/step - loss: 0.4068 - va
l_loss: 0.3395
Epoch 11/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3961 - va
l_loss: 0.3514
Epoch 12/256
172/172 [==============================] - 1s 6ms/step - loss: 0.3946 - va
l_loss: 0.3420
Epoch 13/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3895 - va
l_loss: 0.3208
Epoch 14/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3825 - va
l_loss: 0.3388
Epoch 15/256
172/172 [==============================] - 1s 6ms/step - loss: 0.3773 - va
l_loss: 0.3271
Epoch 16/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3768 - va
l_loss: 0.3169
Epoch 17/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3743 - va
l_loss: 0.3111
Epoch 18/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3682 - va
l_loss: 0.3076
Epoch 19/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3646 - va
l_loss: 0.2998
Epoch 20/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3583 - va
l_loss: 0.2912
Epoch 21/256
```

```
172/172 [==============================] - 1s 6ms/step - loss: 0.3540 - va
l_loss: 0.2888
Epoch 22/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3514 - va
l_loss: 0.2809
Epoch 23/256
172/172 [==============================] - 1s 6ms/step - loss: 0.3511 - va
l_loss: 0.2797
Epoch 24/256
172/172 [==============================] - 1s 6ms/step - loss: 0.3462 - va
l_loss: 0.2775
Epoch 25/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3453 - va
l_loss: 0.2751
Epoch 26/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3427 - va
l_loss: 0.2726
Epoch 27/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3393 - va
l_loss: 0.2735
Epoch 28/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3388 - va
l_loss: 0.2694
Epoch 29/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3360 - va
l_loss: 0.2675
Epoch 30/256
172/172 [==============================] - 1s 6ms/step - loss: 0.3322 - va
l_loss: 0.2642
Epoch 31/256
172/172 [==============================] - 1s 6ms/step - loss: 0.3315 - va
l_loss: 0.2617
Epoch 32/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3275 - va
l_loss: 0.2591
Epoch 33/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3298 - va
l_loss: 0.2614
Epoch 34/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3318 - va
l_loss: 0.2653
Epoch 35/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3343 - va
l_loss: 0.2680
Epoch 36/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3366 - va
l_loss: 0.2707
Epoch 37/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3396 - va
l_loss: 0.2739
Epoch 38/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3424 - va
l_loss: 0.2776
Epoch 39/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3446 - va
l_loss: 0.2816
Epoch 40/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3557 - va
l_loss: 0.2832
Epoch 41/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3513 - va
```

```
l_loss: 0.2900
Epoch 42/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3528 - va
l_loss: 0.2899
Epoch 43/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3504 - va
l_loss: 0.2860
Epoch 44/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3525 - va
l_loss: 0.2902
Epoch 45/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3515 - va
l_loss: 0.2879
Epoch 46/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3519 - va
l_loss: 0.2901
Epoch 47/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3519 - va
l_loss: 0.2884
Epoch 48/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3541 - va
l_loss: 0.3008
Epoch 1/256
172/172 [==============================] - 3s 8ms/step - loss: 0.3263 - va
l_loss: 0.2564
Epoch 2/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3246 - va
l_loss: 0.2557
Epoch 3/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3234 - va
l_loss: 0.2555
Epoch 4/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3248 - va
l_loss: 0.2554
Epoch 5/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3237 - va
l_loss: 0.2553
Epoch 6/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3238 - va
l_loss: 0.2551
Epoch 7/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3235 - va
l_loss: 0.2550
Epoch 8/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3238 - va
l_loss: 0.2550
Epoch 9/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3225 - va
l_loss: 0.2550
Epoch 10/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3236 - va
l_loss: 0.2549
Epoch 11/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3235 - va
l_loss: 0.2549
Epoch 12/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3215 - va
l_loss: 0.2549
Epoch 13/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3235 - va
l_loss: 0.2547
```

```
Epoch 14/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3232 - va
l_loss: 0.2548
Epoch 15/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3222 - va
l_loss: 0.2547
Epoch 16/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3227 - va
l_loss: 0.2546
Epoch 17/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3231 - va
l_loss: 0.2546
Epoch 18/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3225 - va
l_loss: 0.2547
Epoch 19/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3227 - va
l_loss: 0.2545
Epoch 20/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3219 - va
l_loss: 0.2545
Epoch 21/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3241 - va
l_loss: 0.2544
Epoch 22/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3219 - va
l_loss: 0.2546
Epoch 23/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3227 - va
l_loss: 0.2545
Epoch 24/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3222 - va
l_loss: 0.2545
Epoch 25/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3225 - va
l_loss: 0.2544
Epoch 26/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3218 - va
l_loss: 0.2543
Epoch 27/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3233 - va
l_loss: 0.2544
Epoch 28/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3231 - va
l_loss: 0.2542
Epoch 29/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3232 - va
l_loss: 0.2544
Epoch 30/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3220 - va
l_loss: 0.2544
Epoch 31/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3224 - va
l_loss: 0.2543
Epoch 32/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3228 - va
l_loss: 0.2543
Epoch 33/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3215 - va
l_loss: 0.2543
Epoch 34/256
```

```
172/172 [==============================] - 1s 7ms/step - loss: 0.3207 - va
l_loss: 0.2545
Epoch 35/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3221 - va
l_loss: 0.2542
Epoch 36/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3237 - va
l_loss: 0.2542
Epoch 37/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3212 - va
l_loss: 0.2543
Epoch 38/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3233 - va
l_loss: 0.2542
Epoch 39/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3221 - va
l_loss: 0.2542
Epoch 40/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3244 - va
l_loss: 0.2543
Epoch 41/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3207 - va
l_loss: 0.2542
Epoch 42/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3222 - va
l_loss: 0.2542
Epoch 43/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3223 - va
l_loss: 0.2542
Epoch 44/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3219 - va
l_loss: 0.2540
Epoch 45/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3228 - va
l_loss: 0.2541
Epoch 46/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3206 - va
l_loss: 0.2541
Epoch 47/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3215 - va
l_loss: 0.2542
Epoch 48/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3201 - va
l_loss: 0.2543
Epoch 49/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3220 - va
l_loss: 0.2541
Epoch 50/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3232 - va
l_loss: 0.2539
Epoch 51/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3227 - va
l_loss: 0.2540
Epoch 52/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3236 - va
l_loss: 0.2540
Epoch 53/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3223 - va
l_loss: 0.2539
Epoch 54/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3219 - va
```

```
l_loss: 0.2540
Epoch 55/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3220 - va
l_loss: 0.2539
Epoch 56/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3221 - va
l_loss: 0.2538
Epoch 57/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3216 - va
l_loss: 0.2540
Epoch 58/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3226 - va
l_loss: 0.2539
Epoch 59/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3220 - va
l_loss: 0.2540
Epoch 60/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3224 - va
l_loss: 0.2539
Epoch 61/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3203 - va
l_loss: 0.2539
Epoch 62/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3214 - va
l_loss: 0.2539
Epoch 63/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3234 - va
l_loss: 0.2537
Epoch 64/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3215 - va
l_loss: 0.2539
Epoch 65/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3213 - va
l_loss: 0.2539
Epoch 66/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3218 - va
l_loss: 0.2539
Epoch 67/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3227 - va
l_loss: 0.2539
Epoch 68/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3209 - va
l_loss: 0.2539
Epoch 69/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3220 - va
l_loss: 0.2540
Epoch 70/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3213 - va
l_loss: 0.2539
Epoch 71/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3215 - va
l_loss: 0.2537
Epoch 72/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3199 - va
l_loss: 0.2541
Epoch 73/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3215 - va
l_loss: 0.2538
Epoch 74/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3217 - va
l_loss: 0.2539
```

```
Epoch 75/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3220 - va
l_loss: 0.2538
Epoch 76/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3202 - va
l_loss: 0.2540
Epoch 77/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3206 - va
l_loss: 0.2538
Epoch 78/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3210 - va
l_loss: 0.2537
Epoch 79/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3211 - va
l_loss: 0.2538
Epoch 80/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3207 - va
l_loss: 0.2538
Epoch 81/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3219 - va
l_loss: 0.2538
Epoch 82/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3213 - va
l_loss: 0.2538
Epoch 83/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3208 - va
l_loss: 0.2538
Epoch 84/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3201 - va
l_loss: 0.2539
Epoch 85/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3213 - va
l_loss: 0.2538
Epoch 86/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3202 - va
l_loss: 0.2537
Epoch 87/256
172/172 [==============================] - 1s 7ms/step - loss: 0.3210 - va
l_loss: 0.2537
INFO:tensorflow:Assets written to: GenesAE/assets
```

In [10]:

```
plt.figure(figsize=(12,8))
plt.plot(hist.history['loss'])
plt.plot(hist.history['val_loss'])
plt.yscale('log')
plt.xlabel('Epochs')
plt.ylabel('Average Logloss')
plt.legend(['Training','Validation'])
```

Out[10]:

<matplotlib.legend.Legend at 0x7f825a4e01d0>
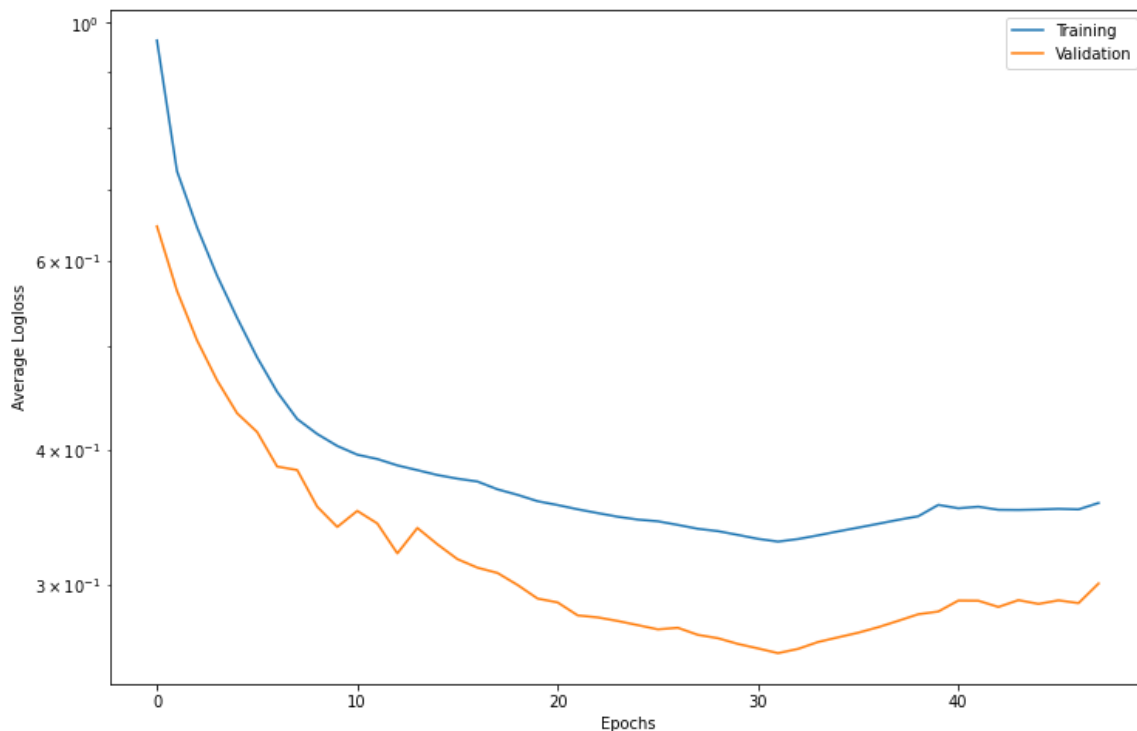
In [11]:

```
ae_cells_train = cell_auto_encd.encoder(cells_train).numpy()
ae_cells_test = cell_auto_encd.encoder(cells_test).numpy()
autoencoder_error = mean_squared_error(cells_test,cell_auto_encd.decoder(ae_cells_test)
.numpy())
print("Cells reconstruction error is " + str(autoencoder_error))
```

Cells reconstruction error is 0.1359665235226094

In [12]:

```
# Comparison with PCA
pca = PCA(n_components=50)
pca.fit(cells_train)
pca_error = mean_squared_error(cells_test,pca.inverse_transform(pca.transform(cells_tes
t)))
print('PCA Reconstruction Error for Cells is ' + str(pca_error))
```

PCA Reconstruction Error for Cells is 0.2175155904767999

- Autoencoders performs well for cell features

In [13]:

```
ae_genes_train = gene_auto_encd.encoder(genes_train).numpy()
ae_genes_test = gene_auto_encd.encoder(genes_test).numpy()
autoencoder_error = mean_squared_error(genes_test,gene_auto_encd.decoder(ae_genes_test)
.numpy())
print("Genes reconstruction error is " + str(autoencoder_error))
```

Genes reconstruction error is 0.25370338816821875

In [14]:

```
# Comparison with PCA
pca = PCA(n_components=386)
pca.fit(genes_train)
pca_error = mean_squared_error(genes_test,pca.inverse_transform(pca.transform(genes_tes
t)))
print('PCA Reconstruction Error for Genes is ' + str(pca_error))
```

PCA Reconstruction Error for Genes is 0.1629985903595509

- PCA performs well for gene features

In [15]:

```
# Replacing the data with encoded data
data_train = np.concatenate((data_train[:,~(c_f+g_f)],ae_genes_train,ae_cells_train),ax
is=1)
data_test = np.concatenate((data_test[:,~(c_f+g_f)],ae_genes_test,ae_cells_test),axis=1
)
```

```python
num_of_lab = train_targets_scored.shape[1]
# num_of_feat = data_train.shape[1]
# n_train = data_train.shape[0]
final_test = data_test.shape[0]


# Predicting Thresholds

p_min = 0.0005
p_max = 0.9995

# Evaluation Metric

# here we uses logloss as the given kaggle dataset asked for performing a logloss metri
ces

def logloss(y_true, y_pred):
    y_pred = tf.clip_by_value(y_pred,p_min,p_max)
    return -backend.mean(y_true*backend.log(y_pred) + (1-y_true)*backend.log(1-y_pred))

# Generating Seeds

num_of_seeds = 3
seeds = [34,9,18]

# Training Loop

num_of_folds = 5
y_pred = np.zeros((final_test,num_of_lab))
oof = tf.constant(0.0)
hists = []
bias = tf.keras.initializers.Constant(np.log(train_label.mean(axis=0)))
for seed in seeds:
    fold = 0
    mskf = MultilabelStratifiedKFold(n_splits=num_of_folds,shuffle=True,random_state=se
ed)
    for train, test in mskf.split(data_train,train_label):
        X_train = data_train[train]
        X_test = data_train[test]
        y_train = train_label[train]
        y_test = train_label[test]

        # Building Neural Network Model

        model = Sequential()
        model.add(layers.Dropout(0.3))
        model.add(layers.Dense(1536))
        model.add(layers.Activation('relu'))
        model.add(layers.BatchNormalization())
        model.add(layers.Dropout(0.7))
        model.add(layers.Dense(1024))
        model.add(layers.Activation('relu'))
        model.add(layers.BatchNormalization())
        model.add(layers.Dropout(0.5))
        model.add(layers.Dense(512))
        model.add(layers.Activation('relu'))
        model.add(layers.BatchNormalization())
        model.add(layers.Dropout(0.3))
        model.add(layers.Dense(num_of_lab,activation='sigmoid',bias_initializer=bias))
```

```python
        model.compile(optimizer=optimizers.Adam(learning_rate=1E-5), loss=losses.Binary
Crossentropy(label_smoothing=0.001), metrics=['binary_crossentropy',logloss])
        reduce_lr = callbacks.ReduceLROnPlateau(monitor='val_logloss', factor=0.3, pati
ence=5, mode='min', min_lr=1E-5)
        early_stopping = callbacks.EarlyStopping(monitor='val_logloss', min_delta=1E-5,
patience=24, mode='min',restore_best_weights=True)
        def scheduler(epoch,lr):
            if epoch%16<9:
                lr += np.exp(-int(epoch/16))*(0.5*1E-2)/16
            else:
                lr -= np.exp(-int(epoch/16))*(0.5*1E-2)/16
            return lr

        lr_scheduler = callbacks.LearningRateScheduler(scheduler)
        hist = model.fit(X_train,y_train, batch_size=128, epochs=192,
                    verbose=1,validation_data = (X_test,y_test),
                    callbacks=[lr_scheduler, early_stopping])

        model.compile(optimizer=optimizers.Adam(learning_rate=1E-5),
                    loss=losses.BinaryCrossentropy(label_smoothing=0.001),
                    metrics=['binary_crossentropy',logloss])
        model.fit(X_train,y_train, batch_size=128,
                epochs=192,verbose=1,validation_data = (X_test,y_test),
                callbacks=[early_stopping])

        hists.append(hist)

        # Save Model
        model.save('AutoEncoded_seed_'+str(seed)+'_fold_'+str(fold))

        # OOF Score
        y_val = model.predict(X_test)
        oof += logloss(tf.constant(y_test,dtype=tf.float32),
                    tf.constant(y_val,dtype=tf.float32))/(num_of_folds*num_of_seeds)

        # Run prediction
        y_pred += model.predict(data_test)/(num_of_folds*num_of_seeds)

        fold += 1
```

```
Epoch 1/192
138/138 [==============================] - 2s 8ms/step - loss: 0.0293 - bi
nary_crossentropy: 0.0262 - logloss: 0.0261 - val_loss: 0.0229 - val_binar
y_crossentropy: 0.0199 - val_logloss: 0.0198
Epoch 2/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0253 - bi
nary_crossentropy: 0.0222 - logloss: 0.0222 - val_loss: 0.0224 - val_binar
y_crossentropy: 0.0193 - val_logloss: 0.0192
Epoch 3/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0228 - bi
nary_crossentropy: 0.0196 - logloss: 0.0196 - val_loss: 0.0213 - val_binar
y_crossentropy: 0.0181 - val_logloss: 0.0181
Epoch 4/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0218 - bi
nary_crossentropy: 0.0186 - logloss: 0.0186 - val_loss: 0.0210 - val_binar
y_crossentropy: 0.0178 - val_logloss: 0.0177
Epoch 5/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0213 - bi
nary_crossentropy: 0.0180 - logloss: 0.0180 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0175 - val_logloss: 0.0174
Epoch 6/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0209 - bi
nary_crossentropy: 0.0175 - logloss: 0.0176 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0173 - val_logloss: 0.0172
Epoch 7/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0174 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 8/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
Epoch 9/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0169 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0167
Epoch 10/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 11/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0198 - bi
nary_crossentropy: 0.0164 - logloss: 0.0164 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0165
Epoch 12/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0199 - bi
nary_crossentropy: 0.0165 - logloss: 0.0166 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 13/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0162 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 14/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0157 - logloss: 0.0158 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0162
Epoch 15/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 16/192
```

```
138/138 [==============================] - 1s 6ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 17/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 18/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 19/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 20/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0160
Epoch 21/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 22/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0160
Epoch 23/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 24/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 25/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 26/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 27/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 28/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 30/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0146 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 31/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0180 - bi
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nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 33/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 34/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 44/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 45/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 46/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 48/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 49/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 56/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 57/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 58/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 59/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 61/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
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Epoch 62/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 63/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 65/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 66/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 67/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 69/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 72/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 73/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 74/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 75/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 76/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 77/192
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138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 78/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 79/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 80/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 81/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 82/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 83/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 84/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 1/192
138/138 [==============================] - 2s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 2/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 3/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 4/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 5/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 6/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 7/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 8/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
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nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 9/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 10/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 12/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 13/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 14/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 15/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 16/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 17/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 18/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 19/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 20/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 21/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 23/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 24/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 25/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 26/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 27/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 28/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 29/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 30/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 31/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 32/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 33/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 34/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 35/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 37/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 38/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
```

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Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 40/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 41/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 42/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 43/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 44/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 45/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 46/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 47/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 48/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 49/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 50/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 51/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 52/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 53/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 54/192
```

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138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 55/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 56/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 57/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 58/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
INFO:tensorflow:Assets written to: AutoEncoded_seed_34_fold_0/assets
Epoch 1/192
138/138 [==============================] - 2s 8ms/step - loss: 0.0293 - bi
nary_crossentropy: 0.0262 - logloss: 0.0261 - val_loss: 0.0231 - val_binar
y_crossentropy: 0.0201 - val_logloss: 0.0201
Epoch 2/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0218 - logloss: 0.0218 - val_loss: 0.0224 - val_binar
y_crossentropy: 0.0194 - val_logloss: 0.0194
Epoch 3/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0226 - bi
nary_crossentropy: 0.0194 - logloss: 0.0194 - val_loss: 0.0216 - val_binar
y_crossentropy: 0.0185 - val_logloss: 0.0184
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0217 - bi
nary_crossentropy: 0.0185 - logloss: 0.0185 - val_loss: 0.0212 - val_binar
y_crossentropy: 0.0179 - val_logloss: 0.0179
Epoch 5/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0213 - bi
nary_crossentropy: 0.0180 - logloss: 0.0180 - val_loss: 0.0208 - val_binar
y_crossentropy: 0.0175 - val_logloss: 0.0175
Epoch 6/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0175 - logloss: 0.0176 - val_loss: 0.0208 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0174
Epoch 7/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 8/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0172 - logloss: 0.0172 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 9/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 11/192
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138/138 [==============================] - 1s 6ms/step - loss: 0.0199 - bi
nary_crossentropy: 0.0165 - logloss: 0.0166 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 12/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0196 - bi
nary_crossentropy: 0.0162 - logloss: 0.0163 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 13/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0194 - bi
nary_crossentropy: 0.0160 - logloss: 0.0161 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 14/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0159 - logloss: 0.0159 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 15/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0192 - bi
nary_crossentropy: 0.0158 - logloss: 0.0159 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 16/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 17/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 19/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 20/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 21/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 22/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 23/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 24/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 25/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 26/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0183 - bi
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nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 28/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 29/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 30/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 31/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0143 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 32/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 33/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 34/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 35/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 36/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 37/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 38/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 40/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 41/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
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y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 42/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 43/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 48/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 49/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 50/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0160
Epoch 52/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 54/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 56/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
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Epoch 57/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 58/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 59/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 61/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 62/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 63/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 64/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 65/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 66/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 67/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 68/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 69/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 70/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 71/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 72/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 73/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 1/192
138/138 [==============================] - 2s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 3/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 4/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 5/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 6/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 8/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 13/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
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nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 17/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 18/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 19/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 20/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 23/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 24/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 25/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 26/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 27/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 28/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 30/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
```

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Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
INFO:tensorflow:Assets written to: AutoEncoded_seed_34_fold_1/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0296 - bi
nary_crossentropy: 0.0265 - logloss: 0.0264 - val_loss: 0.0229 - val_binar
y_crossentropy: 0.0199 - val_logloss: 0.0198
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0219 - logloss: 0.0218 - val_loss: 0.0220 - val_binar
y_crossentropy: 0.0189 - val_logloss: 0.0189
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0227 - bi
nary_crossentropy: 0.0195 - logloss: 0.0195 - val_loss: 0.0213 - val_binar
y_crossentropy: 0.0181 - val_logloss: 0.0181
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0218 - bi
nary_crossentropy: 0.0185 - logloss: 0.0185 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0175 - val_logloss: 0.0175
```

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Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0214 - bi
nary_crossentropy: 0.0182 - logloss: 0.0182 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0173 - val_logloss: 0.0173
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0209 - bi
nary_crossentropy: 0.0176 - logloss: 0.0176 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0172 - logloss: 0.0173 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0172 - logloss: 0.0172 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0170 - logloss: 0.0170 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0168 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0165
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0168 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0165
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0196 - bi
nary_crossentropy: 0.0162 - logloss: 0.0163 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0161 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0158 - logloss: 0.0159 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 19/192
138/138 [==============================] - 1s 6ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 20/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 28/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
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nary_crossentropy: 0.0142 - logloss: 0.0144 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0145 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 48/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0137 - logloss: 0.0139 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
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y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 56/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 57/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 58/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 59/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 61/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 62/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 63/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 64/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 65/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
```

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Epoch 66/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 67/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 68/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 69/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 71/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 72/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 73/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 74/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 75/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 76/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 77/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 78/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 79/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 80/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 81/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 82/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 83/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 84/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 85/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 86/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 87/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0124 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 1/192
138/138 [==============================] - 2s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
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nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
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y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
INFO:tensorflow:Assets written to: AutoEncoded_seed_34_fold_2/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0294 - bi
nary_crossentropy: 0.0263 - logloss: 0.0262 - val_loss: 0.0228 - val_binar
y_crossentropy: 0.0198 - val_logloss: 0.0198
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0251 - bi
nary_crossentropy: 0.0220 - logloss: 0.0220 - val_loss: 0.0221 - val_binar
y_crossentropy: 0.0190 - val_logloss: 0.0190
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0227 - bi
nary_crossentropy: 0.0195 - logloss: 0.0195 - val_loss: 0.0212 - val_binar
y_crossentropy: 0.0181 - val_logloss: 0.0181
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0220 - bi
nary_crossentropy: 0.0188 - logloss: 0.0188 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0214 - bi
nary_crossentropy: 0.0182 - logloss: 0.0182 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0173 - val_logloss: 0.0174
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0211 - bi
nary_crossentropy: 0.0178 - logloss: 0.0178 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0209 - bi
nary_crossentropy: 0.0176 - logloss: 0.0176 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0172
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0172 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0167
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0200 - bi
nary_crossentropy: 0.0166 - logloss: 0.0167 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0197 - bi
nary_crossentropy: 0.0163 - logloss: 0.0163 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0159 - logloss: 0.0160 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0164
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0194 - bi
nary_crossentropy: 0.0160 - logloss: 0.0161 - val_loss: 0.0196 - val_binar
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y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0192 - bi
nary_crossentropy: 0.0158 - logloss: 0.0158 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 28/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
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Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 45/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0140 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 56/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 58/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 59/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
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nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 61/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 62/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 63/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 65/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 66/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 67/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 69/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 72/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 73/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 74/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 75/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
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Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 28/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 31/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
INFO:tensorflow:Assets written to: AutoEncoded_seed_34_fold_3/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0293 - bi
nary_crossentropy: 0.0262 - logloss: 0.0261 - val_loss: 0.0229 - val_binar
y_crossentropy: 0.0199 - val_logloss: 0.0199
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0219 - logloss: 0.0218 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0192
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0226 - bi
nary_crossentropy: 0.0194 - logloss: 0.0194 - val_loss: 0.0214 - val_binar
y_crossentropy: 0.0183 - val_logloss: 0.0183
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0221 - bi
nary_crossentropy: 0.0188 - logloss: 0.0189 - val_loss: 0.0210 - val_binar
y_crossentropy: 0.0178 - val_logloss: 0.0178
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0215 - bi
nary_crossentropy: 0.0182 - logloss: 0.0182 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0175 - val_logloss: 0.0175
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0212 - bi
nary_crossentropy: 0.0179 - logloss: 0.0179 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0174 - logloss: 0.0174 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0172 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0171
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0171 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0167 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0168
Epoch 11/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0200 - bi
nary_crossentropy: 0.0166 - logloss: 0.0166 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0166
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0197 - bi
nary_crossentropy: 0.0163 - logloss: 0.0163 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0194 - bi
nary_crossentropy: 0.0160 - logloss: 0.0161 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0159 - logloss: 0.0159 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0164
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
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nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 28/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 56/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
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Epoch 57/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 58/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 59/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 61/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 62/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 63/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 65/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 66/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 67/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 69/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 71/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 72/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 73/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 74/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 75/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 76/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 77/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 78/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 79/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 80/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 81/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 82/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 83/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 84/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 85/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 86/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 87/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
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nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 88/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 89/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 90/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 91/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
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Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 28/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 42/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 43/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 48/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
INFO:tensorflow:Assets written to: AutoEncoded_seed_34_fold_4/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0295 - bi
nary_crossentropy: 0.0264 - logloss: 0.0263 - val_loss: 0.0229 - val_binar
y_crossentropy: 0.0199 - val_logloss: 0.0199
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0251 - bi
nary_crossentropy: 0.0219 - logloss: 0.0219 - val_loss: 0.0221 - val_binar
y_crossentropy: 0.0190 - val_logloss: 0.0190
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0226 - bi
nary_crossentropy: 0.0194 - logloss: 0.0194 - val_loss: 0.0215 - val_binar
y_crossentropy: 0.0183 - val_logloss: 0.0183
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0215 - bi
nary_crossentropy: 0.0183 - logloss: 0.0183 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 5/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0214 - bi
nary_crossentropy: 0.0181 - logloss: 0.0181 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0174
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0212 - bi
nary_crossentropy: 0.0179 - logloss: 0.0179 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 7/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0171
Epoch 8/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0170 - logloss: 0.0171 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0169
Epoch 9/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0172 - logloss: 0.0172 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0168
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0165
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0200 - bi
nary_crossentropy: 0.0166 - logloss: 0.0166 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0161 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0164
Epoch 13/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0196 - bi
nary_crossentropy: 0.0162 - logloss: 0.0163 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0159 - logloss: 0.0160 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0156 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0188 - bi
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nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0192 - val_binar
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y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0158
Epoch 46/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0157
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
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Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0157
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 56/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 57/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 58/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 59/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 61/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 62/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 63/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 64/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 65/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 66/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 67/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 68/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 69/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0157
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
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nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 10/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 14/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 18/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
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y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 27/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 28/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 31/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
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Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 48/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 52/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
Epoch 55/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0155 - val_logloss: 0.0156
INFO:tensorflow:Assets written to: AutoEncoded_seed_9_fold_0/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0296 - bi
nary_crossentropy: 0.0264 - logloss: 0.0263 - val_loss: 0.0229 - val_binar
y_crossentropy: 0.0198 - val_logloss: 0.0198
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0218 - logloss: 0.0218 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0192
Epoch 3/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0228 - bi
nary_crossentropy: 0.0196 - logloss: 0.0196 - val_loss: 0.0215 - val_binar
y_crossentropy: 0.0184 - val_logloss: 0.0184
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0219 - bi
nary_crossentropy: 0.0187 - logloss: 0.0187 - val_loss: 0.0210 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0216 - bi
nary_crossentropy: 0.0183 - logloss: 0.0184 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0176 - val_logloss: 0.0176
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0175 - logloss: 0.0175 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0174
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0175 - logloss: 0.0175 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0171 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0171 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 11/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0199 - bi
nary_crossentropy: 0.0165 - logloss: 0.0165 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 12/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0196 - bi
nary_crossentropy: 0.0162 - logloss: 0.0163 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0161 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0164
Epoch 15/192
```

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138/138 [==============================] - 1s 8ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 16/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 19/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 20/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 21/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 22/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 23/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 24/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 25/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 26/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 29/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 30/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0183 - bi
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nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 33/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 44/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 50/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 56/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 58/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
```

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Epoch 61/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 64/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 65/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 66/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 67/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 69/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 73/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 75/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 76/192
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138/138 [==============================] - 1s 7ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 2/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 5/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 6/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 15/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
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nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 17/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 32/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 35/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 36/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 37/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 39/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 45/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
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Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
INFO:tensorflow:Assets written to: AutoEncoded_seed_9_fold_1/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0294 - bi
nary_crossentropy: 0.0263 - logloss: 0.0262 - val_loss: 0.0230 - val_binar
y_crossentropy: 0.0200 - val_logloss: 0.0200
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0248 - bi
nary_crossentropy: 0.0216 - logloss: 0.0216 - val_loss: 0.0223 - val_binar
y_crossentropy: 0.0193 - val_logloss: 0.0192
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0228 - bi
nary_crossentropy: 0.0196 - logloss: 0.0196 - val_loss: 0.0214 - val_binar
y_crossentropy: 0.0182 - val_logloss: 0.0182
Epoch 4/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0219 - bi
nary_crossentropy: 0.0187 - logloss: 0.0187 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0212 - bi
nary_crossentropy: 0.0179 - logloss: 0.0180 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0174
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0210 - bi
nary_crossentropy: 0.0177 - logloss: 0.0177 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0171
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0172 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0172 - logloss: 0.0172 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0169 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0198 - bi
nary_crossentropy: 0.0164 - logloss: 0.0165 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0196 - bi
nary_crossentropy: 0.0162 - logloss: 0.0163 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0164
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0194 - bi
nary_crossentropy: 0.0160 - logloss: 0.0160 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0157 - logloss: 0.0158 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
```

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Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0161
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0162
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0149 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 30/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
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nary_crossentropy: 0.0137 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 51/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 53/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 55/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 61/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 62/192
138/138 [==============================] - 1s 7ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 65/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 66/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 67/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 69/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 73/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 75/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
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Epoch 76/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 77/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 78/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 79/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 80/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 81/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 82/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 83/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 1/192
138/138 [==============================] - 3s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 8/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
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nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 37/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
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Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 61/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 65/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 66/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 67/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 69/192
```

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138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 73/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 75/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 76/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 77/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 78/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 79/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 80/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 81/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 82/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 83/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 84/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
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nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 85/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 86/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 87/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
INFO:tensorflow:Assets written to: AutoEncoded_seed_9_fold_2/assets
Epoch 1/192
138/138 [==============================] - 2s 9ms/step - loss: 0.0294 - bi
nary_crossentropy: 0.0263 - logloss: 0.0262 - val_loss: 0.0229 - val_binar
y_crossentropy: 0.0199 - val_logloss: 0.0199
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0252 - bi
nary_crossentropy: 0.0220 - logloss: 0.0220 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0191
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0228 - bi
nary_crossentropy: 0.0196 - logloss: 0.0196 - val_loss: 0.0214 - val_binar
y_crossentropy: 0.0183 - val_logloss: 0.0182
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0217 - bi
nary_crossentropy: 0.0184 - logloss: 0.0185 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0215 - bi
nary_crossentropy: 0.0182 - logloss: 0.0182 - val_loss: 0.0208 - val_binar
y_crossentropy: 0.0176 - val_logloss: 0.0175
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0209 - bi
nary_crossentropy: 0.0176 - logloss: 0.0176 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0173
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0174 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0205 - bi
nary_crossentropy: 0.0171 - logloss: 0.0172 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0169
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0169 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0168 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0200 - bi
nary_crossentropy: 0.0166 - logloss: 0.0166 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0165
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0196 - bi
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nary_crossentropy: 0.0162 - logloss: 0.0163 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0164
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0161 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0192 - bi
nary_crossentropy: 0.0157 - logloss: 0.0158 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0162
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0198 - val_binar
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y_crossentropy: 0.0163 - val_logloss: 0.0162
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0160
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
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Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 55/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 58/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0160
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 61/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 65/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 66/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 67/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 69/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 73/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
```

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nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 75/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0167 - b
inary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_bina
ry_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
```

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Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 44/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
```

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nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
INFO:tensorflow:Assets written to: AutoEncoded_seed_9_fold_3/assets
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0296 - b
inary_crossentropy: 0.0265 - logloss: 0.0264 - val_loss: 0.0229 - val_bina
ry_crossentropy: 0.0200 - val_logloss: 0.0199
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0219 - logloss: 0.0218 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0192
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0225 - bi
nary_crossentropy: 0.0193 - logloss: 0.0193 - val_loss: 0.0214 - val_binar
y_crossentropy: 0.0183 - val_logloss: 0.0183
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0218 - bi
nary_crossentropy: 0.0185 - logloss: 0.0186 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0214 - bi
nary_crossentropy: 0.0181 - logloss: 0.0181 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0175
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0210 - bi
nary_crossentropy: 0.0177 - logloss: 0.0177 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0173
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0174 - logloss: 0.0174 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0171
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0174 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0170 - logloss: 0.0170 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0166 - logloss: 0.0167 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0168
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0197 - bi
nary_crossentropy: 0.0163 - logloss: 0.0164 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0199 - bi
nary_crossentropy: 0.0165 - logloss: 0.0165 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0165
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0194 - bi
nary_crossentropy: 0.0160 - logloss: 0.0161 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0159 - logloss: 0.0160 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0190 - bi
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nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0152 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0151 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0143 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
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Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 54/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 55/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 59/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 61/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 65/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 66/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 67/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 69/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 73/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 75/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 76/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
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nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 77/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 78/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 79/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 80/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 81/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 82/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 83/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 84/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 85/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 86/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 87/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0160 - bi
nary_crossentropy: 0.0122 - logloss: 0.0124 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 88/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 89/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0124 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 90/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0160 - bi
nary_crossentropy: 0.0122 - logloss: 0.0124 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 91/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 92/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 93/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0159 - bi
nary_crossentropy: 0.0121 - logloss: 0.0122 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 94/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 95/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0159 - bi
nary_crossentropy: 0.0122 - logloss: 0.0123 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 96/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0159 - bi
nary_crossentropy: 0.0122 - logloss: 0.0123 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 97/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0159 - bi
nary_crossentropy: 0.0122 - logloss: 0.0123 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 98/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0160 - bi
nary_crossentropy: 0.0122 - logloss: 0.0124 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 99/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0158 - bi
nary_crossentropy: 0.0120 - logloss: 0.0122 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 100/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0158 - bi
nary_crossentropy: 0.0120 - logloss: 0.0121 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0162 - b
inary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_bina
ry_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
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Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 22/192
```

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138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
INFO:tensorflow:Assets written to: AutoEncoded_seed_9_fold_4/assets
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0294 - b
inary_crossentropy: 0.0263 - logloss: 0.0262 - val_loss: 0.0230 - val_bina
ry_crossentropy: 0.0201 - val_logloss: 0.0200
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0218 - logloss: 0.0218 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0191
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0228 - bi
nary_crossentropy: 0.0196 - logloss: 0.0196 - val_loss: 0.0215 - val_binar
y_crossentropy: 0.0184 - val_logloss: 0.0183
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0216 - bi
nary_crossentropy: 0.0183 - logloss: 0.0183 - val_loss: 0.0210 - val_binar
y_crossentropy: 0.0178 - val_logloss: 0.0178
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0213 - bi
nary_crossentropy: 0.0180 - logloss: 0.0181 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0174
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0211 - bi
nary_crossentropy: 0.0178 - logloss: 0.0178 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0175 - logloss: 0.0175 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0171 - logloss: 0.0171 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0170
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0172 - logloss: 0.0172 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0202 - bi
nary_crossentropy: 0.0168 - logloss: 0.0169 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0166
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0199 - bi
nary_crossentropy: 0.0165 - logloss: 0.0165 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0164
Epoch 12/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0198 - bi
nary_crossentropy: 0.0164 - logloss: 0.0165 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0162 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0162
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0159 - logloss: 0.0159 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0161
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0161
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0161
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 26/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
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nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0160
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 37/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 39/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0195 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 48/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 55/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
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Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 61/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 65/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 66/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 67/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 69/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 73/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 75/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 76/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 77/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 78/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 79/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 80/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 81/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 82/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 83/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 84/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 85/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0124 - logloss: 0.0125 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0158
Epoch 86/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0124 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 87/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0159 - bi
nary_crossentropy: 0.0121 - logloss: 0.0123 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 88/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0160 - bi
```

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nary_crossentropy: 0.0122 - logloss: 0.0124 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0166 - b
inary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_bina
ry_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 4/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 18/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
INFO:tensorflow:Assets written to: AutoEncoded_seed_18_fold_0/assets
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0294 - b
inary_crossentropy: 0.0263 - logloss: 0.0262 - val_loss: 0.0230 - val_bina
ry_crossentropy: 0.0200 - val_logloss: 0.0199
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0251 - bi
nary_crossentropy: 0.0220 - logloss: 0.0220 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0191
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0227 - bi
nary_crossentropy: 0.0195 - logloss: 0.0195 - val_loss: 0.0214 - val_binar
y_crossentropy: 0.0183 - val_logloss: 0.0182
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0218 - bi
nary_crossentropy: 0.0186 - logloss: 0.0186 - val_loss: 0.0211 - val_binar
y_crossentropy: 0.0179 - val_logloss: 0.0179
Epoch 5/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0212 - bi
nary_crossentropy: 0.0180 - logloss: 0.0180 - val_loss: 0.0208 - val_binar
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y_crossentropy: 0.0175 - val_logloss: 0.0175
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0209 - bi
nary_crossentropy: 0.0176 - logloss: 0.0176 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0173 - val_logloss: 0.0173
Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0174 - logloss: 0.0175 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 8/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0171 - logloss: 0.0171 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 9/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0172 - logloss: 0.0172 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0168
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0167
Epoch 11/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0200 - bi
nary_crossentropy: 0.0166 - logloss: 0.0166 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0197 - bi
nary_crossentropy: 0.0163 - logloss: 0.0164 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0192 - bi
nary_crossentropy: 0.0158 - logloss: 0.0159 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0192 - bi
nary_crossentropy: 0.0158 - logloss: 0.0159 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0192 - bi
nary_crossentropy: 0.0158 - logloss: 0.0159 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0152 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 20/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
```

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Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 22/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0152 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 24/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 25/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 26/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 31/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
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138/138 [==============================] - 1s 9ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0140 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 50/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
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nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0134 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 55/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 58/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 59/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 61/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 65/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 66/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0196 - val_binar
```

y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 67/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 69/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 70/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 71/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 72/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 73/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 75/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0169 - b
inary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_bina
ry_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 2/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 3/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158

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Epoch 7/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 8/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 9/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 10/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 14/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 16/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 21/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 22/192
```

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138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
INFO:tensorflow:Assets written to: AutoEncoded_seed_18_fold_1/assets
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0294 - b
inary_crossentropy: 0.0263 - logloss: 0.0261 - val_loss: 0.0230 - val_bina
ry_crossentropy: 0.0200 - val_logloss: 0.0200
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0218 - logloss: 0.0218 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0192 - val_logloss: 0.0192
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0227 - bi
nary_crossentropy: 0.0195 - logloss: 0.0195 - val_loss: 0.0215 - val_binar
y_crossentropy: 0.0183 - val_logloss: 0.0183
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0220 - bi
nary_crossentropy: 0.0188 - logloss: 0.0188 - val_loss: 0.0208 - val_binar
y_crossentropy: 0.0176 - val_logloss: 0.0176
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0213 - bi
nary_crossentropy: 0.0180 - logloss: 0.0180 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0175
Epoch 6/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0210 - bi
nary_crossentropy: 0.0177 - logloss: 0.0177 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0173 - val_logloss: 0.0173
Epoch 7/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0175 - logloss: 0.0175 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0173
Epoch 8/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0174 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0170
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0170 - logloss: 0.0170 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0173
Epoch 10/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0203 - bi
nary_crossentropy: 0.0169 - logloss: 0.0170 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0168
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 12/192
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138/138 [==============================] - 1s 9ms/step - loss: 0.0198 - bi
nary_crossentropy: 0.0164 - logloss: 0.0165 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0166
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0161 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0165
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0157 - logloss: 0.0158 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 15/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0156 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0164
Epoch 16/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0154 - logloss: 0.0154 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 18/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 21/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 24/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 25/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 26/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 27/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
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nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 28/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 29/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0149 - logloss: 0.0150 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 38/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 39/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 41/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 42/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
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y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 43/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 44/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 45/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 49/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 51/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 52/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 55/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 56/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 57/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
```

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Epoch 58/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 59/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 61/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 62/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0175 - b
inary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_bina
ry_crossentropy: 0.0158 - val_logloss: 0.0160
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 4/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 5/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 6/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 7/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 8/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 9/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 10/192
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138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0160
Epoch 12/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 13/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 15/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0160
Epoch 16/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 18/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0160
Epoch 19/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 23/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 24/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 25/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
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nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 26/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 27/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 28/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0140 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 30/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 31/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0141 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
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y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 42/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 44/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 45/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 47/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 49/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 50/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 52/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 54/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 55/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
```

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Epoch 56/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 57/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 58/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 59/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
Epoch 60/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0159
INFO:tensorflow:Assets written to: AutoEncoded_seed_18_fold_2/assets
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0295 - b
inary_crossentropy: 0.0263 - logloss: 0.0262 - val_loss: 0.0229 - val_bina
ry_crossentropy: 0.0199 - val_logloss: 0.0199
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0251 - bi
nary_crossentropy: 0.0219 - logloss: 0.0219 - val_loss: 0.0222 - val_binar
y_crossentropy: 0.0191 - val_logloss: 0.0191
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0229 - bi
nary_crossentropy: 0.0197 - logloss: 0.0197 - val_loss: 0.0216 - val_binar
y_crossentropy: 0.0184 - val_logloss: 0.0184
Epoch 4/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0219 - bi
nary_crossentropy: 0.0187 - logloss: 0.0187 - val_loss: 0.0211 - val_binar
y_crossentropy: 0.0179 - val_logloss: 0.0180
Epoch 5/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0214 - bi
nary_crossentropy: 0.0182 - logloss: 0.0182 - val_loss: 0.0209 - val_binar
y_crossentropy: 0.0177 - val_logloss: 0.0177
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0209 - bi
nary_crossentropy: 0.0176 - logloss: 0.0176 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0174 - val_logloss: 0.0174
Epoch 7/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0208 - bi
nary_crossentropy: 0.0175 - logloss: 0.0175 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 8/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0206 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0206 - val_binar
y_crossentropy: 0.0171 - val_logloss: 0.0171
Epoch 9/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0170 - logloss: 0.0170 - val_loss: 0.0207 - val_binar
y_crossentropy: 0.0172 - val_logloss: 0.0172
Epoch 10/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0168 - val_loss: 0.0203 - val_binar
y_crossentropy: 0.0169 - val_logloss: 0.0169
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Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0197 - bi
nary_crossentropy: 0.0163 - logloss: 0.0164 - val_loss: 0.0200 - val_binar
y_crossentropy: 0.0166 - val_logloss: 0.0166
Epoch 12/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0160 - logloss: 0.0161 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0166
Epoch 13/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0195 - bi
nary_crossentropy: 0.0161 - logloss: 0.0162 - val_loss: 0.0198 - val_binar
y_crossentropy: 0.0164 - val_logloss: 0.0164
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0157 - logloss: 0.0158 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 15/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0190 - bi
nary_crossentropy: 0.0156 - logloss: 0.0157 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0164
Epoch 16/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0156 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 17/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 18/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 24/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 25/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0188 - bi
nary_crossentropy: 0.0153 - logloss: 0.0154 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 26/192
```

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138/138 [==============================] - 1s 9ms/step - loss: 0.0184 - bi
nary_crossentropy: 0.0150 - logloss: 0.0150 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0163
Epoch 27/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 28/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0162
Epoch 29/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 30/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0180 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 31/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0146 - logloss: 0.0147 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 32/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 33/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 35/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 36/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 37/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 38/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 40/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 41/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
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nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 42/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 43/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 44/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 45/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 46/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 47/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 48/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 49/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 50/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 51/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0137 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 52/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 53/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 54/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 55/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0161
Epoch 56/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0196 - val_binar
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y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 57/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 59/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 60/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 61/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 62/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 63/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 64/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 65/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 66/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 67/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 68/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 69/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 70/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 71/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
```

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Epoch 72/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 73/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 74/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 75/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 76/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 77/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 78/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 79/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0160
Epoch 80/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 81/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 82/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 83/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0125 - logloss: 0.0127 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 1/192
138/138 [==============================] - 3s 11ms/step - loss: 0.0167 - b
inary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_bina
ry_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 4/192
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138/138 [==============================] - 1s 8ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 5/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 6/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 7/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 8/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 9/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 10/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 12/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 13/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 15/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 18/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
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nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 21/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 24/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 25/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 26/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 27/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 28/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 29/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 30/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 31/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 32/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 33/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 34/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
```

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y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 35/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 36/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0133 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 38/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 40/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 41/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
INFO:tensorflow:Assets written to: AutoEncoded_seed_18_fold_3/assets
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0296 - b
inary_crossentropy: 0.0265 - logloss: 0.0263 - val_loss: 0.0227 - val_bina
ry_crossentropy: 0.0197 - val_logloss: 0.0197
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0250 - bi
nary_crossentropy: 0.0218 - logloss: 0.0218 - val_loss: 0.0221 - val_binar
y_crossentropy: 0.0191 - val_logloss: 0.0191
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0232 - bi
nary_crossentropy: 0.0200 - logloss: 0.0199 - val_loss: 0.0212 - val_binar
y_crossentropy: 0.0181 - val_logloss: 0.0181
Epoch 4/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0219 - bi
nary_crossentropy: 0.0187 - logloss: 0.0187 - val_loss: 0.0208 - val_binar
y_crossentropy: 0.0176 - val_logloss: 0.0176
Epoch 5/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0216 - bi
nary_crossentropy: 0.0183 - logloss: 0.0183 - val_loss: 0.0205 - val_binar
y_crossentropy: 0.0173 - val_logloss: 0.0173
Epoch 6/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0212 - bi
nary_crossentropy: 0.0179 - logloss: 0.0180 - val_loss: 0.0204 - val_binar
y_crossentropy: 0.0170 - val_logloss: 0.0170
Epoch 7/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0207 - bi
nary_crossentropy: 0.0173 - logloss: 0.0173 - val_loss: 0.0202 - val_binar
y_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 8/192
138/138 [==============================] - 1s 10ms/step - loss: 0.0203 - b
inary_crossentropy: 0.0170 - logloss: 0.0170 - val_loss: 0.0202 - val_bina
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ry_crossentropy: 0.0168 - val_logloss: 0.0168
Epoch 9/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0204 - bi
nary_crossentropy: 0.0170 - logloss: 0.0170 - val_loss: 0.0201 - val_binar
y_crossentropy: 0.0167 - val_logloss: 0.0167
Epoch 10/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0201 - bi
nary_crossentropy: 0.0167 - logloss: 0.0167 - val_loss: 0.0199 - val_binar
y_crossentropy: 0.0165 - val_logloss: 0.0165
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0200 - bi
nary_crossentropy: 0.0166 - logloss: 0.0167 - val_loss: 0.0197 - val_binar
y_crossentropy: 0.0163 - val_logloss: 0.0163
Epoch 12/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0198 - bi
nary_crossentropy: 0.0164 - logloss: 0.0165 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0162 - val_logloss: 0.0162
Epoch 13/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0196 - bi
nary_crossentropy: 0.0162 - logloss: 0.0162 - val_loss: 0.0196 - val_binar
y_crossentropy: 0.0161 - val_logloss: 0.0161
Epoch 14/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0193 - bi
nary_crossentropy: 0.0158 - logloss: 0.0159 - val_loss: 0.0195 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 15/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0191 - bi
nary_crossentropy: 0.0157 - logloss: 0.0158 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 16/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0155 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0159
Epoch 18/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0153 - logloss: 0.0153 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0160 - val_logloss: 0.0160
Epoch 21/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0152 - logloss: 0.0152 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0151 - logloss: 0.0151 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
```

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Epoch 24/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0187 - bi
nary_crossentropy: 0.0152 - logloss: 0.0153 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 25/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0189 - bi
nary_crossentropy: 0.0154 - logloss: 0.0155 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0159 - val_logloss: 0.0159
Epoch 26/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 27/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0185 - bi
nary_crossentropy: 0.0150 - logloss: 0.0151 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0158
Epoch 28/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0186 - bi
nary_crossentropy: 0.0151 - logloss: 0.0152 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 29/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0183 - bi
nary_crossentropy: 0.0148 - logloss: 0.0149 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0158
Epoch 30/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0182 - bi
nary_crossentropy: 0.0147 - logloss: 0.0148 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 31/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0144 - logloss: 0.0145 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 32/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0181 - bi
nary_crossentropy: 0.0145 - logloss: 0.0146 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 33/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0179 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 34/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 35/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0142 - logloss: 0.0143 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0157
Epoch 36/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0177 - bi
nary_crossentropy: 0.0141 - logloss: 0.0143 - val_loss: 0.0191 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0178 - bi
nary_crossentropy: 0.0143 - logloss: 0.0144 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 38/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0141 - logloss: 0.0142 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 39/192
```

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138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 40/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 41/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 42/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0141 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 43/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0176 - bi
nary_crossentropy: 0.0140 - logloss: 0.0142 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 44/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0175 - bi
nary_crossentropy: 0.0139 - logloss: 0.0140 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
Epoch 45/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0139 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 46/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 47/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0174 - bi
nary_crossentropy: 0.0138 - logloss: 0.0139 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 48/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0136 - logloss: 0.0138 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 49/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0173 - bi
nary_crossentropy: 0.0137 - logloss: 0.0138 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 50/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 51/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0137 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 52/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0171 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 53/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 54/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0171 - bi
```

nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 55/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0172 - bi
nary_crossentropy: 0.0135 - logloss: 0.0136 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 56/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 57/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0134 - logloss: 0.0135 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 58/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
Epoch 59/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0169 - bi
nary_crossentropy: 0.0132 - logloss: 0.0134 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 60/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 61/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0170 - bi
nary_crossentropy: 0.0133 - logloss: 0.0135 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 62/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0132 - logloss: 0.0133 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 63/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
Epoch 64/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 65/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
Epoch 66/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 67/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 68/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 69/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0193 - val_binar

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y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 70/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 71/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 72/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 73/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
Epoch 74/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 75/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 76/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
Epoch 77/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 78/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 79/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0126 - logloss: 0.0128 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 80/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 81/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 82/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 83/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0125 - logloss: 0.0126 - val_loss: 0.0193 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 84/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0162 - bi
nary_crossentropy: 0.0124 - logloss: 0.0126 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0156
```

```
Epoch 85/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0161 - bi
nary_crossentropy: 0.0123 - logloss: 0.0125 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0158 - val_logloss: 0.0157
Epoch 86/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0194 - val_binar
y_crossentropy: 0.0157 - val_logloss: 0.0157
Epoch 1/192
138/138 [==============================] - 2s 10ms/step - loss: 0.0166 - b
inary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_bina
ry_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 2/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 3/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 4/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 5/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 6/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 7/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 8/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 9/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 10/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 11/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 12/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 13/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 14/192
```

```
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 15/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 16/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 17/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 18/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 19/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 20/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 21/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 22/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 23/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 24/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 25/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 26/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 27/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 28/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 29/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
```

```
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 30/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 31/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 32/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 33/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 34/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 35/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 36/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 37/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 38/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 39/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 40/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 41/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 42/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 43/192
138/138 [==============================] - 1s 8ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 44/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
```

```
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 45/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 46/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 47/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 48/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 49/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 50/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0163 - bi
nary_crossentropy: 0.0126 - logloss: 0.0127 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 51/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0168 - bi
nary_crossentropy: 0.0131 - logloss: 0.0132 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 52/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 53/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 54/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 55/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 56/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 57/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 58/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 59/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
```

```
Epoch 60/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 61/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 62/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0129 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 63/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 64/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0165 - bi
nary_crossentropy: 0.0128 - logloss: 0.0130 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 65/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0166 - bi
nary_crossentropy: 0.0129 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 66/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0167 - bi
nary_crossentropy: 0.0130 - logloss: 0.0131 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
Epoch 67/192
138/138 [==============================] - 1s 9ms/step - loss: 0.0164 - bi
nary_crossentropy: 0.0127 - logloss: 0.0128 - val_loss: 0.0192 - val_binar
y_crossentropy: 0.0156 - val_logloss: 0.0156
INFO:tensorflow:Assets written to: AutoEncoded_seed_18_fold_4/assets
```

In [17]:

```python
# Analysis of Training

tf.print('OOF score is ',oof)

plt.figure(figsize=(12,8))

hist_trains = []
hist_lens = []
for i in range(num_of_folds*num_of_seeds):
    hist_train = (hists[i]).history['logloss']
    hist_trains.append(hist_train)
    hist_lens.append(len(hist_train))
hist_train = []
for i in range(min(hist_lens)):
    hist_train.append(np.mean([hist_trains[j][i] for j in range(num_of_folds*num_of_see
ds)]))

plt.plot(hist_train)

hist_vals = []
hist_lens = []
for i in range(num_of_folds*num_of_seeds):
    hist_val = (hists[i]).history['val_logloss']
    hist_vals.append(hist_val)
    hist_lens.append(len(hist_val))
hist_val = []
for i in range(min(hist_lens)):
    hist_val.append(np.mean([hist_vals[j][i] for j in range(num_of_folds*num_of_seeds
)]))

plt.plot(hist_val)

plt.yscale('log')
plt.xlabel('Epochs')
plt.ylabel('Average Logloss')
plt.legend(['Training','Validation'])
```
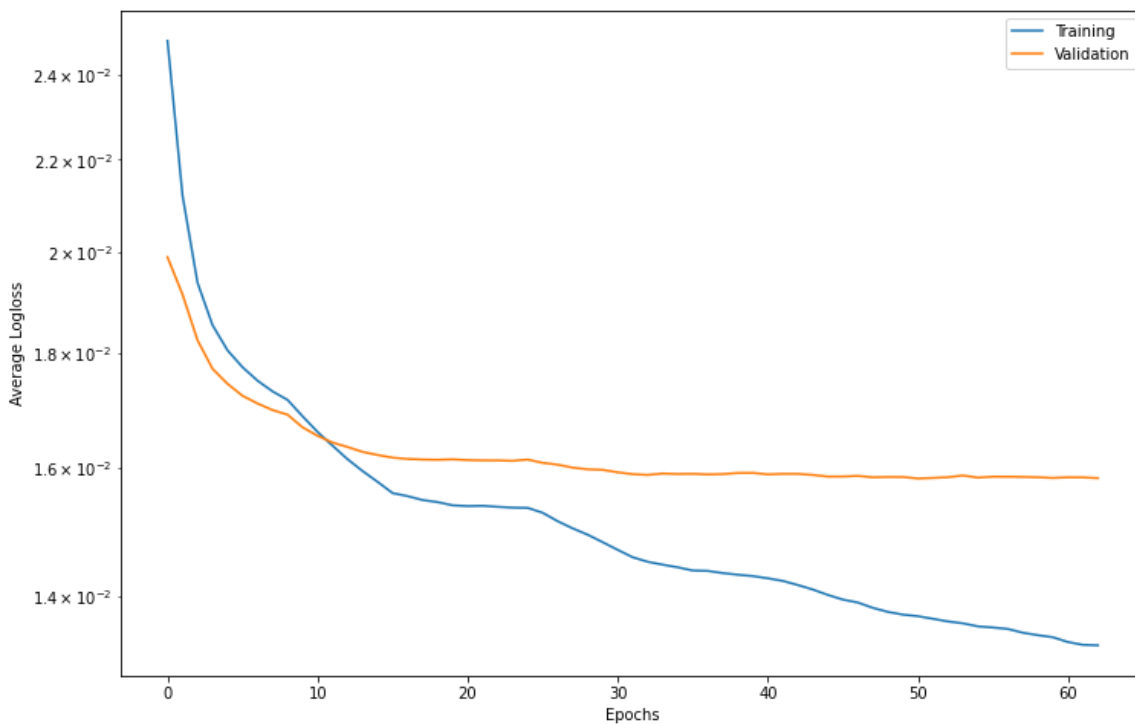
```
OOF score is  0.0157985613
```

Out[17]:

```
<matplotlib.legend.Legend at 0x7f81a0643250>
```


In [18]:

```python
p_min = 0.0005
p_max = 0.9995

# Generate submission file, Clip Predictions

sub = pd.read_csv('/content/sample_submission.csv')
sub.iloc[:,1:] = np.clip(y_pred,p_min,p_max)

# Set ctl_vehicle to 0
sub.iloc[test_features['cp_type'] == 'ctl_vehicle',1:] = 0

# Save Submission
sub.to_csv('/content/submission.csv', index=False)
```

Conclusion

- For the given dataset it was observed that applying autoencoder the neural network model gives a logloss of 0.0128 & a val_loss of 0.0192.