[{"metadata":{"trusted":true},"id":"9bc20b6c","cell\_type":"code","source":"model.compile(optimizer='adam', loss='binary\_crossentropy', metrics=['accuracy'])\nmodel.fit(x=X\_train, y=y\_train, batch\_size=32, epochs=22, validation\_data=(X\_val, y\_val))","execution\_count":17,"outputs":[{"output\_type":"stream","text":"Epoch 1/22\n46/46 [==============================] - 60s 1s/step - loss: 0.7499 - accuracy: 0.6574 - val\_loss: 0.6490 - val\_accuracy: 0.7355\nEpoch 2/22\n46/46 [==============================] - 58s 1s/step - loss: 0.4524 - accuracy: 0.7931 - val\_loss: 0.5959 - val\_accuracy: 0.7613\nEpoch 3/22\n46/46 [==============================] - 58s 1s/step - loss: 0.4301 - accuracy: 0.7917 - val\_loss: 0.5666 - val\_accuracy: 0.6935\nEpoch 4/22\n46/46 [==============================] - 59s 1s/step - loss: 0.3245 - accuracy: 0.8692 - val\_loss: 0.5049 - val\_accuracy: 0.7548\nEpoch 5/22\n46/46 [==============================] - 61s 1s/step - loss: 0.3855 - accuracy: 0.8180 - val\_loss: 0.7427 - val\_accuracy: 0.5452\nEpoch 6/22\n46/46 [==============================] - 60s 1s/step - loss: 0.3764 - accuracy: 0.8346 - val\_loss: 0.4881 - val\_accuracy: 0.7226\nEpoch 7/22\n46/46 [==============================] - 60s 1s/step - loss: 0.2748 - accuracy: 0.8761 - val\_loss: 0.6409 - val\_accuracy: 0.6161\nEpoch 8/22\n46/46 [==============================] - 61s 1s/step - loss: 0.2601 - accuracy: 0.8879 - val\_loss: 0.4563 - val\_accuracy: 0.7484\nEpoch 9/22\n46/46 [==============================] - 61s 1s/step - loss: 0.2289 - accuracy: 0.9031 - val\_loss: 0.6621 - val\_accuracy: 0.6452\nEpoch 10/22\n46/46 [==============================] - 60s 1s/step - loss: 0.2162 - accuracy: 0.9190 - val\_loss: 0.2976 - val\_accuracy: 0.8677\nEpoch 11/22\n46/46 [==============================] - 60s 1s/step - loss: 0.2013 - accuracy: 0.9197 - val\_loss: 0.2659 - val\_accuracy: 0.8968\nEpoch 12/22\n46/46 [==============================] - 61s 1s/step - loss: 0.1814 - accuracy: 0.9246 - val\_loss: 0.2930 - val\_accuracy: 0.8806\nEpoch 13/22\n46/46 [==============================] - 61s 1s/step - loss: 0.1872 - accuracy: 0.9183 - val\_loss: 0.2438 - val\_accuracy: 0.8968\nEpoch 14/22\n46/46 [==============================] - 61s 1s/step - loss: 0.1629 - accuracy: 0.9433 - val\_loss: 0.3297 - val\_accuracy: 0.8452\nEpoch 15/22\n46/46 [==============================] - 61s 1s/step - loss: 0.2542 - accuracy: 0.8865 - val\_loss: 0.2911 - val\_accuracy: 0.8774\nEpoch 16/22\n46/46 [==============================] - 61s 1s/step - loss: 0.1744 - accuracy: 0.9356 - val\_loss: 0.2594 - val\_accuracy: 0.8903\nEpoch 17/22\n46/46 [==============================] - 62s 1s/step - loss: 0.1612 - accuracy: 0.9322 - val\_loss: 0.2806 - val\_accuracy: 0.8613\nEpoch 18/22\n46/46 [==============================] - 62s 1s/step - loss: 0.1676 - accuracy: 0.9356 - val\_loss: 0.2666 - val\_accuracy: 0.8935\nEpoch 19/22\n46/46 [==============================] - 62s 1s/step - loss: 0.1721 - accuracy: 0.9356 - val\_loss: 0.2403 - val\_accuracy: 0.8935\nEpoch 20/22\n46/46 [==============================] - 61s 1s/step - loss: 0.1109 - accuracy: 0.9661 - val\_loss: 0.6307 - val\_accuracy: 0.7613\nEpoch 21/22\n46/46 [==============================] - 62s 1s/step - loss: 0.1922 - accuracy: 0.9218 - val\_loss: 0.4856 - val\_accuracy: 0.8000\nEpoch 22/22\n46/46 [==============================] - 62s 1s/step - loss: 0.1346 - accuracy: 0.9474 - val\_loss: 0.2469 - val\_accuracy: 0.9032\n","name":"stdout"},{"output\_type":"execute\_result","execution\_count":17,"data":{"text/plain":""},"metadata":{}}]}]

10/10 [==============================] - 3s 229ms/step - loss: 0.3117 - accuracy: 0.8613

Loss of the model is - [0.31165802478790283, 0.8612903356552124]

10/10 [==============================] - 3s 284ms/step - loss: 0.3117 - accuracy: 0.8613

Accuracy of the model is - [0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124, 0.31165802478790283, 0.8612903356552124] %