LAB Logbook

Lab 2

```
model = Sequential()

# Input Layer
model.add(Input(shape=(n_features,)))

# Hidden Layers
model.add(Dense(135, activation='relu'))
model.add(Dense(62, activation='relu'))
model.add(Dense(50, activation='relu'))
model.add(Dense(25, activation='relu'))

# Output Layer
model.add(Dense(1, activation='sigmoid'))
```

```
model.compile(
    optimizer='adam',
    loss='binary_crossentropy',
    metrics=['accuracy']
)
```

```
model.summary()
```

Model: "sequential_5"

Layer (type)	Output Shape	Param #
dense_21 (Dense)	(None, 135)	4,725
dense_22 (Dense)	(None, 62)	8,432
dense_23 (Dense)	(None, 50)	3,150
dense_24 (Dense)	(None, 25)	1,275
dense_25 (Dense)	(None, 1)	26

Total params: 17,608 (68.78 KB)

Trainable params: 17,608 (68.78 KB)

Non-trainable params: 0 (0.00 B)

```
loss, accuracy = model.evaluate(X_test, y_test)

print("Test Loss:", loss)
print("Test Accuracy:", accuracy)
```

```
4/4 ━━━━━━━━━━━━━━━━━━━━ 0s 19ms/step - accuracy: 0.9412 - loss: 0.1902
Test Loss: 0.19016815721988678
Test Accuracy: 0.9411764740943909
```

Task 2:

Final ouput:

OUTPUT 1: 0.7929

OUTPUT 2: 0.7929