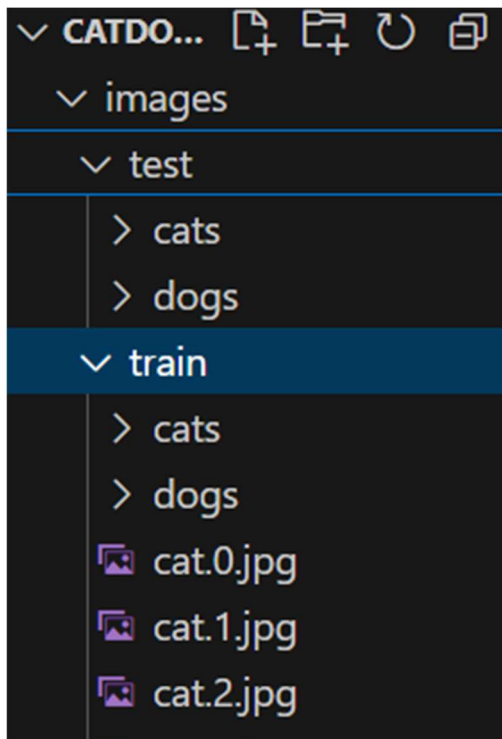


Wprowadziłem 1999 zdjęć kotów (plik cat.666.jpg był uszkodzony, więc został usunięty) oraz 2000 zdjęć psów.



```
seed(1)
val_ratio = 0.25
src_directory = 'images/train'
```

```
def define_model():
    model = Sequential()
    model = Sequential()

    model.add(Conv2D(32, (3, 3), activation='relu', kernel_initializer='he_uniform', padding='same',
                    input_shape=(200, 200, 3)))
    model.add(MaxPooling2D((2, 2)))
    model.add(Flatten())
    model.add(Dense(128, activation='relu', kernel_initializer='he_uniform'))
    model.add(Dense(1, activation='sigmoid'))

    opt = SGD(learning_rate=0.001, momentum=0.9)
    model.compile(optimizer=opt, loss='binary_crossentropy', metrics=['accuracy'])
    return model

model = define_model()
```

```
batch_size = 64
train_it = datagen.flow_from_directory(dataset_home + 'train/',
    class_mode='binary', batch_size=64, target_size=(200, 200))
test_it = datagen.flow_from_directory(dataset_home + 'test/',
    class_mode='binary', batch_size=64, target_size=(200, 200))
```

```
history = model.fit(train_it, steps_per_epoch=train_steps,
    validation_data=test_it, validation_steps=test_steps, epochs=20, verbose=0)

_, acc = model.evaluate(test_it, steps=len(test_it), verbose=0)
print('> %.3f' % (acc * 100.0), '%')
```

```
> 59.172 %
```

```
(myenv) PS C:\Users\domin\Desktop\CatDogAI> █
```