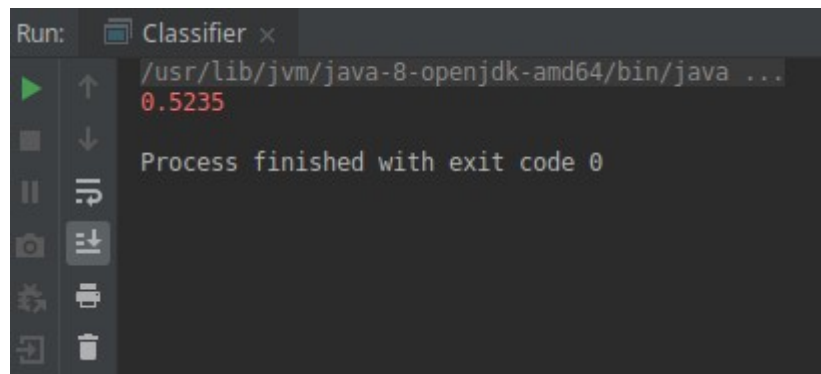


CSE464
DIGITAL IMAGE PROCESSING
HW4
REPORT

HAKKI ERDEM DUMAN
151044005

8-bit Grayscale Value

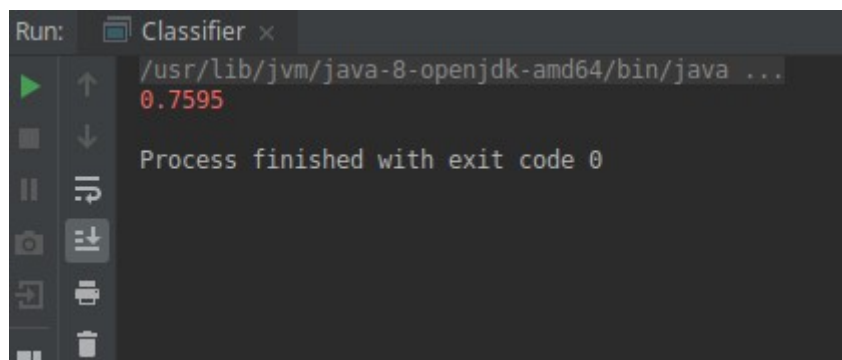
In this part, grayscale value of each pixel is trained and tested. A feature vector with one size is returned in this part.



```
Run: Classifier x
/usr/lib/jvm/java-8-openjdk-amd64/bin/java ...
0.5235
Process finished with exit code 0
```

The Histogram of the 9x9 Window

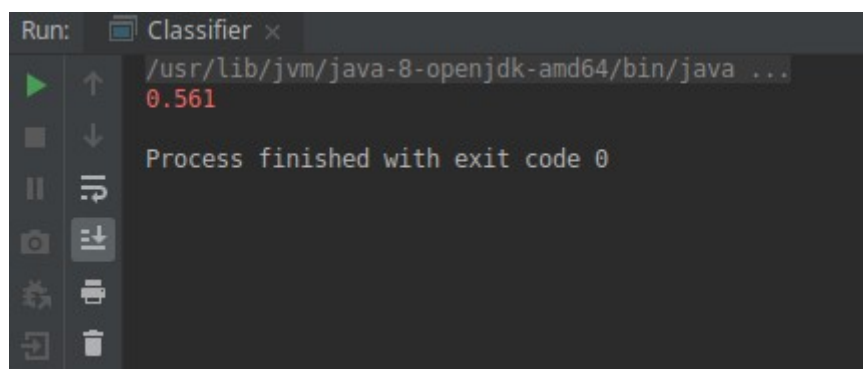
In this part, histogram value of 9x9 window's center pixel is trained and tested. Feature vector's size is 256, which means each grayscale value has an occurrence number.



```
Run: Classifier x
/usr/lib/jvm/java-8-openjdk-amd64/bin/java ...
0.7595
Process finished with exit code 0
```

The Mean and Variance of the 9x9 Window

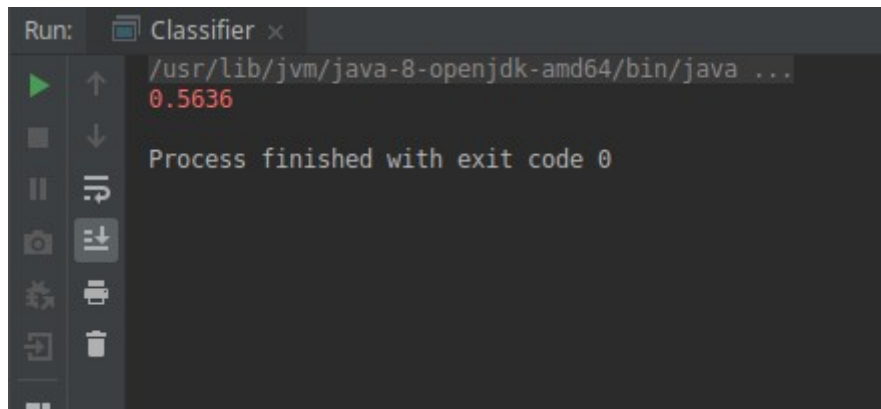
In this part, mean and variance value of 9x9 window's center pixel is trained and tested. A feature vector with size 2 is returned. Zeroth index is mean and first index is variance.



```
Run: Classifier x
/usr/lib/jvm/java-8-openjdk-amd64/bin/java ...
0.561
Process finished with exit code 0
```

The Granulometry of the 9x9 Window

In this part, granulometry of 9x9 window's center pixel is trained and tested. The thing that is done is performing opening on 9x9 window with `Gopening.invoke` method and 3x3 square matrix. A feature vector with size 81 is returned. It's a flatten version of 2D image, which is opened.



```
Run: Classifier x
/usr/lib/jvm/java-8-openjdk-amd64/bin/java ...
0.5636
Process finished with exit code 0
```