

# PHYS488: Week3 - Objective-orientation introduction

Zachary Humphreys  
200951438

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## Abstract

### 1 Task 1

This first section required the near-Gaussian graph generated from last week to be re-imported into the code for this week so it could be compared with the expected values, and a second method for creating a Gaussian histogram which used the **java.util.Random** class to generate random Gaussian values. This was

done by creating another Histogram instance with identical parameters on line 24 and adding into the for-loop used for filling the histograms a separate section for the second histogram which had to scale the randomly generated Gaussian value by 0.5 as the default values produced have a standard deviation of 1 and was done on lines 37 and 38 and then printed to console and to a .csv file with lines 44 and 45.

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```
24 Histogram nextGaussHist = new Histogram(50, -2, 2);
36 //For Next Gauss
37 double value_next = randGen.nextGaussian()*0.5;
38 nextGaussHist.fill(value_next);
44 nextGaussHist.print();
45 nextGaussHist.writeToDisk("nextgauss_test.csv");
```

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