# Data strucctures project, Testing document

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### 1 Introduction

The program was tested using JUnit tests during developement. The tests include cases for degenerate hulls and also contain normally distributed 2D point sets.

The correct output was verified using Octave, and correct results were saved so that the JUnit tests could check the output of the program.

#### 2 Inputs Used in Tests

Different distributions were used as inputs during testing; these include normal distribution, exponential distribution and uniform distribution. We also used a combination of different distributions for x and y coordinates, respectively.

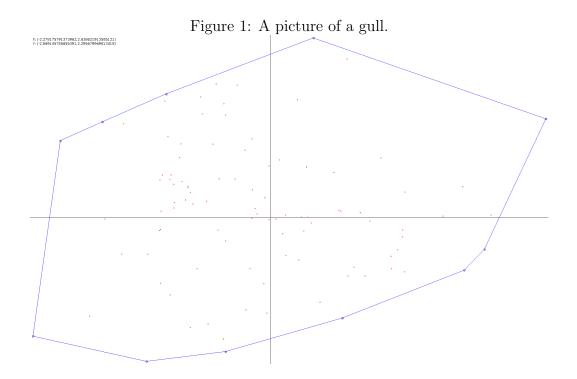
Testing was conducted with and without the Akl-Toussaint heuristic.

We also implemented a simple iteration functionality to the program and this allowed us to capture average running times. This eliminates interferance from other running processes. octave

```
public void foo(int bar) {
}
```

# 3 Running the Tests

## 4 Graphical Presentation of the Results of the Empirical Testing of the Correctness of the Program



REFERENCES REFERENCES

### References

[1] Convex hull algorithms,

Wikipedia, the free encyclopedia

http://en.wikipedia.org/wiki/Convex\_hull\_algorithms