Algorithm 1:

Chart, line chart

Description automatically generated

Algorithm 2:

Chart, line chart

Description automatically generated

Algorithm 3:

Chart, line chart

Description automatically generated

Algorithm 4:

Chart, histogram

Description automatically generated

Explanation:

For algorithm 1 I created an array for the even integers and compared the distance to get the maximum distance b/2 the two even integers, as in the case the comparison was not checked every time this might be the case where the time taken by the algo1 < then the algo 2 and

When comparing the time taken by the stream and the normal iterative way streams took more time than the iterative one.

**Question 2.** Proof by Induction

Text, letter

Description automatically generated