## Sorting Algorithms in C

This project contains various sorting algorithms implemented in C. Each are tested in terms clocks and with an ascending, descending, and random permutation of integers from 1 to  $\mathtt{n}$ .

## **Files**

The project contains bash scripts to automatically compile and execute the sorting algorithms.

- run.sh: Script to compile and run the given sorting algorithm C program.
- run3x.sh: Script to compile and run the given sorting algorithm C program thrice.

## How to Use

## Compilation and Execution:

To compile and run the program, use the scripts as follows:

```
./run.sh <filename> <arraysize> asc # ascending permutation
./run.sh <filename> <arraysize> desc # descending permutation
./run.sh <filename> <arraysize> rand <seed> # random permutation
./run3x.sh <filename> <arraysize> asc # ascending permutation 3x
./run3x.sh <filename> <arraysize> desc # descending permutation 3x
./run3x.sh <filename> <arraysize> rand <seed> # random permutation 3x
```