

Choice: Option 1 - Parallel

Compiling program:

For a simple compilation, with no details about threads in output:

```
gcc pmergesort.c -pthread
```

For compilation that will result in thread information in output:

```
gcc -D DEBUG pmergesort.c -pthread
```

Running program:

Example usage: `./a.out mydata.txt 10 4`

In order to run the program, a text file is required - containing numbers that are to be sorted. The format of the data file is numbers, each separated by a space.

— A sample data file (**mydata.txt**) that can be used as input is in the zip file

The numbers present after the input file are:

argv[2]: Maximum number of elements in the datafile up to which only 2 threads are spawned; in this case if there are less than or equal to 10 elements in mydata.txt, then only 2 threads are spawned.

argv[3]: Number of threads to be spawned if size of input is greater than argv[2].