```
 1 C:\Users\hiral\Downloads\openjdk-14+36_windows-
   x64_bin\jdk-14\bin\java.exe "-javaagent:C:\Program
   Files\JetBrains\IntelliJ IDEA Community Edition 2021.
   2.2\lib\idea_rt.jar=54861:C:\Program Files\JetBrains\
   IntelliJ IDEA Community Edition 2021.2.2\bin" -Dfile.
   encoding=UTF-8 -classpath C:\Users\hiral\IdeaProjects
   \INFO6205-PSA-Assignments\target\classes;C:\Users\
   hiral\.m2\repository\org\apache\logging\log4j\log4j-
   api\2.14.1\log4j-api-2.14.1.jar;C:\Users\hiral\.m2\
   repository\log4j\log4j\1.2.17\log4j-1.2.17.jar;C:\
   Users\hiral\.m2\repository\com\google\guava\guava\30.
   1.1-jre\guava-30.1.1-jre.jar;C:\Users\hiral\.m2\
   repository\com\google\guava\failureaccess\1.0.1\
   failureaccess-1.0.1.jar;C:\Users\hiral\.m2\repository
   \com\google\guava\listenablefuture\9999.0-empty-to-
   avoid-conflict-with-guava\listenablefuture-9999.0-
   empty-to-avoid-conflict-with-guava.jar;C:\Users\hiral
   \.m2\repository\com\google\code\findbugs\jsr305\3.0.2
   \jsr305-3.0.2.jar;C:\Users\hiral\.m2\repository\org\
   checkerframework\checker-qual\3.8.0\checker-qual-3.8.
   0.jar;C:\Users\hiral\.m2\repository\com\google\
   errorprone\error_prone_annotations\2.5.1\
   error_prone_annotations-2.5.1.jar;C:\Users\hiral\.m2\
   repository\com\google\j2objc\j2objc-annotations\1.3\
   j2objc-annotations-1.3.jar;C:\Users\hiral\.m2\
   repository\org\ini4j\ini4j\0.5.4\ini4j-0.5.4.jar edu.
   neu.coe.info6205.sort.par.Main
 2 Degree of parallelism: 7
 3 Available processor on the system: 8
 4 For Array length of :1000000,2 threads, meanTime: 443
    minTime: 826 optimal cutoff 910000
 5 For Array length of :2000000,2 threads, meanTime:
   1298 minTime: 826 optimal cutoff 910000
 6 For Array length of :3000000,2 threads, meanTime:
   1783 minTime: 826 optimal cutoff 910000
 7 For Array length of :4000000,2 threads, meanTime:
   2108 minTime: 826 optimal cutoff 910000
 8 For Array length of :1000000,4 threads, meanTime: 428
    minTime: 837 optimal cutoff 710000
 9 For Array length of :2000000,4 threads, meanTime:
   1036 minTime: 837 optimal cutoff 710000
```

```
10 For Array length of :3000000,4 threads, meanTime:
   1431 minTime: 837 optimal cutoff 710000
11 For Array length of :4000000,4 threads, meanTime:
   2360 minTime: 837 optimal cutoff 710000
12 For Array length of :1000000,8 threads, meanTime: 462
    minTime: 916 optimal cutoff 710000
13 For Array length of :2000000,8 threads, meanTime: 967
    minTime: 916 optimal cutoff 710000
14 For Array length of :3000000,8 threads, meanTime:
   2282 minTime: 916 optimal cutoff 710000
15 For Array length of :4000000,8 threads, meanTime:
   2426 minTime: 916 optimal cutoff 710000
16 For Array length of :1000000,16 threads, meanTime:
   754 minTime: 962 optimal cutoff 610000
17 For Array length of :2000000,16 threads, meanTime:
   1336 minTime: 962 optimal cutoff 610000
18 For Array length of :3000000,16 threads, meanTime:
   1670 minTime: 962 optimal cutoff 610000
19 For Array length of :4000000,16 threads, meanTime:
   2045 minTime: 962 optimal cutoff 610000
20 For Array length of :1000000,32 threads, meanTime:
   714 minTime: 1345 optimal cutoff 510000
21 For Array length of :2000000,32 threads, meanTime:
   1256 minTime: 1345 optimal cutoff 510000
22 For Array length of :3000000,32 threads, meanTime:
   1890 minTime: 1345 optimal cutoff 510000
23 For Array length of :4000000,32 threads, meanTime:
   2266 minTime: 1345 optimal cutoff 510000
24 For Array length of :1000000,64 threads, meanTime:
   808 minTime: 1460 optimal cutoff 710000
25 For Array length of :2000000,64 threads, meanTime:
   1257 minTime: 1460 optimal cutoff 710000
26 For Array length of :3000000,64 threads, meanTime:
   1890 minTime: 1460 optimal cutoff 710000
27 For Array length of :4000000,64 threads, meanTime:
   2308 minTime: 1460 optimal cutoff 710000
28
29 Process finished with exit code 0
30
```