```
 1  "C:\Program Files\Java\jdk1.8.0_181\bin\java.exe" "-
    javaagent:C:\Program Files\JetBrains\IntelliJ IDEA
    Community Edition 2018.2.5\lib\idea_rt.jar=50789:C:\
    Program Files\JetBrains\IntelliJ IDEA Community Edition
    2018.2.5\bin" -Dfile.encoding=UTF-8 -classpath "C:\Program
     Files\Java\jdk1.8.0_181\jre\lib\charsets.jar;C:\Program
    Files\Java\jdk1.8.0_181\jre\lib\deploy.jar;C:\Program
    Files\Java\jdk1.8.0_181\jre\lib\ext\access-bridge-64.jar;C
    :\Program Files\Java\jdk1.8.0_181\jre\lib\ext\cldrdata.jar
    ;C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\dnsns.jar;
    C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\jaccess.jar
    ;C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\jfxrt.jar;
    C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\localedata.
    jar;C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\nashorn
    .jar;C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\sunec.
    jar;C:\Program Files\Java\jdk1.8.0_181\jre\lib\ext\
    sunjce_provider.jar;C:\Program Files\Java\jdk1.8.0_181\jre
    \lib\ext\sunmscapi.jar;C:\Program Files\Java\jdk1.8.0_181\
    jre\lib\ext\sunpkcs11.jar;C:\Program Files\Java\jdk1.8.
    0_181\jre\lib\ext\zipfs.jar;C:\Program Files\Java\jdk1.8.
    0_181\jre\lib\javaws.jar;C:\Program Files\Java\jdk1.8.
    0_181\jre\lib\jce.jar;C:\Program Files\Java\jdk1.8.0_181\
    jre\lib\jfr.jar;C:\Program Files\Java\jdk1.8.0_181\jre\lib
    \jfxswt.jar;C:\Program Files\Java\jdk1.8.0_181\jre\lib\
    jsse.jar;C:\Program Files\Java\jdk1.8.0_181\jre\lib\
    management-agent.jar;C:\Program Files\Java\jdk1.8.0_181\
    jre\lib\plugin.jar;C:\Program Files\Java\jdk1.8.0_181\jre\
    lib\resources.jar;C:\Program Files\Java\jdk1.8.0_181\jre\
    lib\rt.jar;D:\Assignment3\out\production\Assignment3"
    Assignment3.Main
 2  0 to load assn3in.txt, 1 to create new random file
 3  0
 4  Linked Priority Queue
 5  Data: 1 Priority: 1
 6  Data: 1 Priority: 1
 7  Data: 1 Priority: 1
 8  Data: 3 Priority: 3
 9  Data: 3 Priority: 3
10  Data: 5 Priority: 5
11  Data: 7 Priority: 7
12  Data: 7 Priority: 7
13  Data: 10 Priority: 10
14  Data: 10 Priority: 10
15  Array Min Heap
16  Data: 1 Priority: 1
```

```
17 Data: 1 Priority: 1
18 Data: 1 Priority: 1
19 Data: 3 Priority: 3
20 Data: 3 Priority: 3
21 Data: 5 Priority: 5
22 Data: 7 Priority: 7
23 Data: 7 Priority: 7
24 Data: 10 Priority: 10
25 Data: 10 Priority: 10
26 left
27 10<->5
28 right
29 5<->1
30 left
31 10<->7
32 right
33 7<->3
34 left
35 10<->1
36 left
37 3<->1
38 right
39 3<->1
40 left
41 7<->3
42 10 3 1 7 3 1 10 7 5 1
43 1
44 1
45 1
46 3
47 5
48 7
49 3
50 7
51 10
52 10
53 linked pq start: 16605047857293
54 linked pq end: 16605048957483
55 1100190
56 Array heap  start: 16605048957483
57 Array heap end: 16605049709102
58 751619
59 Tree heap start: 16605049709102
60 Tree heap end: 16605050760343
61 1051241
```

```
62
63 Process finished with exit code 0
64
```