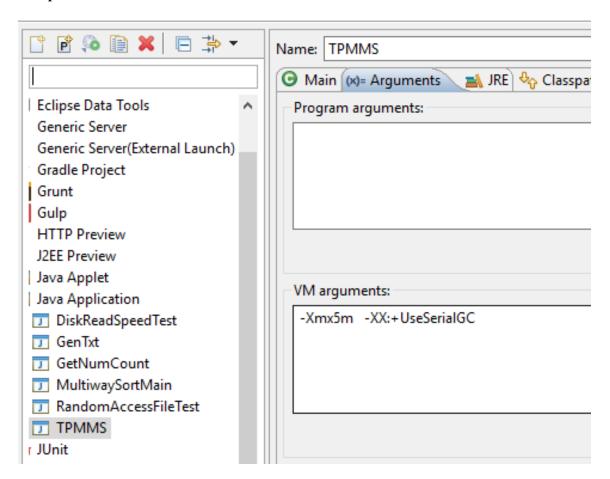
#### Eclipse VM 设置



## 文件名: random\_group10\_1M\_5MB.txt (7270KB)

```
<terminated> TPMMS [Java Application] C:\Program Files\Java\jre1.8.0_151\bin\javaw.exe (Dec. 25, 2018, 11:55:39 p.m.)

file to be sorted: random_group10_1M_5MB.txt

pass one time: 232 ms
pass two time: 266 ms

total time: 498 ms

*** Manually delete all temporary and sorted files/folder before next running! ***
```

### 文件名: random\_group10\_10M\_5MB.txt \_72700KB)

<terminated> TPMMS [Java Application] C:\Program Files\Java\jre1.8.0\_151\bin\javaw.exe (Dec. 25, 2018, 11:58:07 p.m.)

file to be sorted: random\_group10\_10M\_5MB.txt

pass one time: 1604 ms pass two time: 3088 ms

total time: 4693 ms

\*\*\* Manually delete all temporary and sorted files/folder before next running! \*\*\*

#### 主要提升部分:

- 1. 文件 IO,pass one 中用字节流代替字符流,使用 FileChannel 通道配合 MappedByteBuffer
- 2. 数字拼接使用 bit 移位, 代替 String.split()方式
- 3. pass two 读取还是使用 MappedByteBuffer,写入使用字符流以便直接阅读
- 4. JVM 的 GC 使用串行 GC, 并行 GC 此处效果不佳。
- ! 多次测试前需手动删除临时文件夹和前一次的输出文件!

领先组之前的测试结果:

# Project 1 – Demo Results

1 million data with 5 mb - 846ms

10 million data with 5mb - 7401ms