

```
-verbose:GC
-XX:+PrintGCDetails
-XX:+PrintGCDateStamps
-Xmx200M
-Xmn50M
-XX:MaxTenuringThreshold=3
-XX:TargetSurvivorRatio=60
-XX:+PrintTenuringDistribution
-XX:+UseConcMarkSweepGC CMS
-XX:+UseParNewGC
```

```
package main.java.Test1;
```

```
public class GC4 {
    public static void main(String[] args) throws InterruptedException {
        byte[] byte_1=new byte[512*1024];
        byte[] byte_2=new byte[512*1024];

        myGC();
        Thread.sleep(1000);
        System.out.println("1111111");

        myGC();
        Thread.sleep(1000);
        System.out.println("2222222");

        myGC();
        Thread.sleep(1000);
        System.out.println("3333333");

        myGC();
        Thread.sleep(1000);
        System.out.println("4444444");

        byte[] byte_3=new byte[1024*1024];
        byte[] byte_4=new byte[1024*1024];
        byte[] byte_5=new byte[1024*1024];

        myGC();
        Thread.sleep(1000);
        System.out.println("5555555");

        myGC();
        Thread.sleep(1000);
        System.out.println("6666666");
```

```

    System.out.println("hello world");
}

private static void myGC(){
    for(int i=0;i<40;i++){
        byte[] byteArr=new byte[1024*1024];
    }
}
}

```

2020-02-07T17:19:24.895+0800: [GC (Allocation Failure) 2020-02-07T17:19:24.897+0800: [ParNew  
Desired survivor size 3145728 bytes, new threshold 3 (max 3)  
- age 1: 1749144 bytes, 1749144 total  
: 40448K->1733K(46080K), 0.0020908 secs] 40448K->1733K(189440K), 0.0042659  
secs] [Times: user=0.00 sys=0.00, real=0.00 secs]  
1111111

2020-02-07T17:19:25.910+0800: [GC (Allocation Failure) 2020-02-07T17:19:25.910+0800: [ParNew  
Desired survivor size 3145728 bytes, new threshold 3 (max 3)  
- age 1: 341824 bytes, 341824 total  
- age 2: 1741872 bytes, 2083696 total  
: 42480K->2358K(46080K), 0.0014345 secs] 42480K->2358K(189440K), 0.0015095  
secs] [Times: user=0.01 sys=0.00, real=0.00 secs]  
2222222

2020-02-07T17:19:26.922+0800: [GC (Allocation Failure) 2020-02-07T17:19:26.922+0800: [ParNew  
Desired survivor size 3145728 bytes, new threshold 3 (max 3)  
- age 1: 56 bytes, 56 total  
- age 2: 341248 bytes, 341304 total  
- age 3: 1740848 bytes, 2082152 total  
: 42869K->2395K(46080K), 0.0013224 secs] 42869K->2395K(189440K), 0.0013886  
secs] [Times: user=0.00 sys=0.00, real=0.00 secs]  
3333333

2020-02-07T17:19:27.928+0800: [GC (Allocation Failure) 2020-02-07T17:19:27.929+0800: [ParNew  
Desired survivor size 3145728 bytes, new threshold 3 (max 3)  
- age 1: 56 bytes, 56 total  
- age 2: 56 bytes, 112 total  
- age 3: 341248 bytes, 341360 total  
: 43114K->934K(46080K), 0.0040880 secs] 43114K->2646K(189440K), 0.0041804  
secs] [Times: user=0.00 sys=0.00, real=0.01 secs]

4444444

2020-02-07T17:19:28.984+0800: [GC (Allocation Failure) 2020-02-

07T17:19:28.984+0800: [ParNew

Desired survivor size 3145728 bytes, new threshold 1 (max 3)

- age 1: 3145832 bytes, 3145832 total

- age 2: 56 bytes, 3145888 total

- age 3: 56 bytes, 3145944 total

: 41660K->3151K(46080K), 0.0054767 secs] 43373K->5222K(189440K), 0.0055638  
secs] [Times: user=0.02 sys=0.00, real=0.01 secs]

5555555

2020-02-07T17:19:29.994+0800: [GC (Allocation Failure) 2020-02-

07T17:19:29.994+0800: [ParNew

Desired survivor size 3145728 bytes, new threshold 3 (max 3)

- age 1: 56 bytes, 56 total

: 43882K->39K(46080K), 0.0024342 secs] 45953K->5182K(189440K), 0.0024831  
secs] [Times: user=0.00 sys=0.00, real=0.00 secs]

6666666

hello world

Heap

par new generation total 46080K, used 18040K [0x00000000f3800000,  
0x00000000f6a00000, 0x00000000f6a00000)

eden space 40960K, 43% used [0x00000000f3800000, 0x00000000f4994550,  
0x00000000f6000000)

from space 5120K, 0% used [0x00000000f6000000, 0x00000000f6009e70,  
0x00000000f6500000)

to space 5120K, 0% used [0x00000000f6500000, 0x00000000f6500000,  
0x00000000f6a00000)

concurrent mark-sweep generation total 143360K, used 5143K  
[0x00000000f6a00000, 0x00000000ff600000, 0x0000000100000000)

Metaspace used 3998K, capacity 4568K, committed 4864K, reserved 1056768K

class space used 447K, capacity 460K, committed 512K, reserved 1048576K

Process finished with exit code 0