

1.Java

1/2 1/2

2.

:

:

OutOfMemory

:

1/2 1/2 1/2 1/2

3.

3.1

3.1.1 Reference Counting :

0

3.1.2

- **Mark-Sweep** :

Copying :

$$\frac{1}{2} \quad \frac{1}{2}$$

- **Mark-Compact** : ½ - ½ ½ ½

- ½ ½ ½ ½ ½

3.2

3.2.1 **Incremental Collecting** :
JDK5.0

3.2.2 **Generational Collecting** :

J2SE1.2

3.3

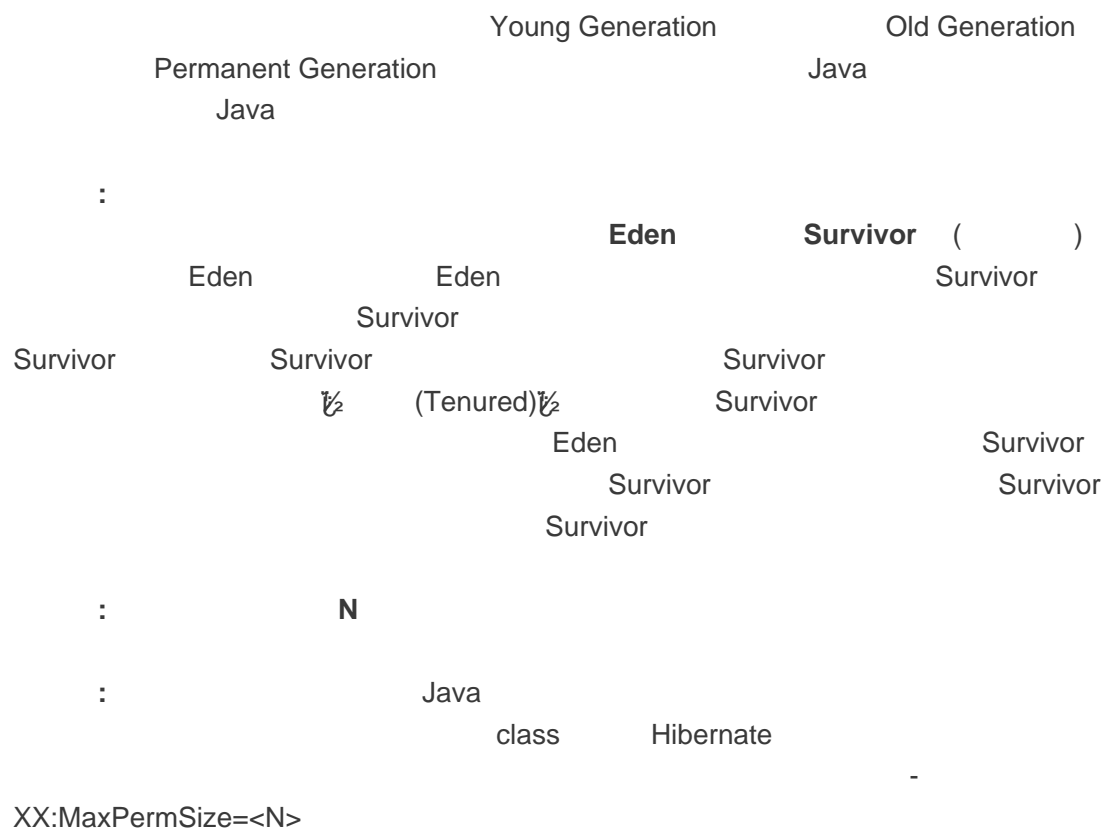
3.3.1 :

100M

3.3.2 :
CPU

3.3.3 :

4.



5.JAVA

GC

GC

Scavenge GC Full GC

Scavenge GC

Scavenge GC Eden GC

Survivor Survivor GC Eden

Eden GC

Eden

Full GC Young Tenured Perm Full GC

Scavenge GC Full GC

JVM GC ½ GC Tenured FullGC Perm System.gc() Full

GC Heap