

JVM

-JVM

1.

Program Counter Register

PC

CPU

1

JVM

CPU

CPU

JVM

native

native

undefined

(OutOfMemory)

2.Java

Java Java Virtual Machine Stack

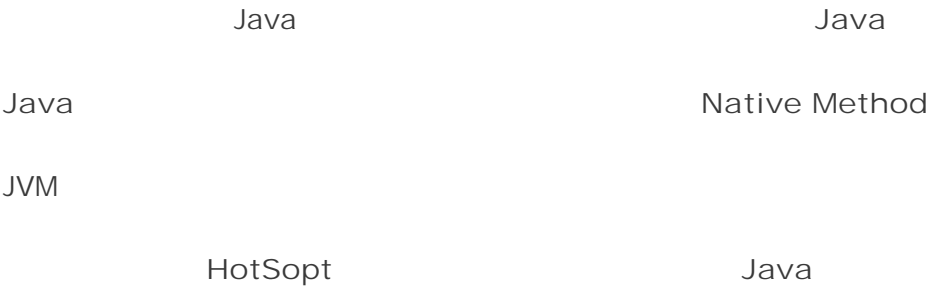
Java

Java

Java

- 1. StackOverflowError
- 2. OutOfMemoryError

3.



- 1. StackOverflowError
- 2. OutOfMemoryError

4.

Java

Java

JVM

JIT

server

GC

Eden

From Survivor

ToSurvivor

1.

OutOfMemoryError

5.

5.1.

Class

5.2

JVM

Class

String intern

JVM

1/2

1/2

HotSpot

JVM

JDK7

Hotspot

1.

OutOfMemoryError

2.

OutOfMemoryError

6.

NIO, native

JVM

1/2

1/2

DirectBuffer

DirectBuffer

ByteBuffer

ByteBuffer

ByteBuffer

JVM

DirectBuffer

1.

2.

IO

1.DirectBuffer

1.

Java

Java

java

Object obj = new Object();

Object obj

Java

reference

new

Object();

Java

Object

Instance Data

JAVA

reference

Java

Java

1.

Java

reference

2.

Java

reference

reference
reference

Java

Sun HotSpot

2. TLAB
TLAB

Thread Local Allocation Buffer

CAS

JVM

TLAB

TLAB

XMIND

