

1.

⑥ yield() method in java threads.

yield() method is static method of Thread class and it can stop the currently executing thread and will give a chance to other waiting threads of the same priority. If in case there are no waiting threads or if all the waiting threads have low priority then the same thread will continue its execution. The advantage is to get a chance to execute other waiting threads so if our current thread takes more time and allocate processor to other threads.

syntax: public static void yield()

ex: class ExThread extends Thread {  
 public void run()  
 {  
   for(int i=0; i<5; i++)  
   {  
     Thread.yield();  
     System.out.println("Thread starts" +  
       Thread.currentThread().  
       getName());  
   }  
   System.out.println("Thread ended" +  
     Thread.currentThread().  
     getName());  
 }  
}  
class YieldTesting  
{  
 public static void main(String[] args)  
 {  
   ExThread thread = new ExThread();  
   thread.start();  
 }  
}

output:

Thread started : main  
 Thread started : Thread-0 } giving chance to other thread.  
 Thread started : main  
 Thread started : Thread-0.  
 ;

### ① diff between Error and Exception.

Exception and errors both are subclasses of Throwable class. Error indicates a problem that occurs due to lack of system resources etc. Exception occur ~~due to~~ at runtime and compile time.

#### Error

- ① Unchecked type
- ① irrecoverable
- ① can't occur at compile time.
- ① belongs to java.lang.Error
- ① ex:  
OutOfMemoryError

#### Exception

- ① checked and unchecked.
- ① recoverable.
- ① can occur, at <sup>both</sup> compile and runtime.
- ① belongs to java.lang.Exception
- ① ex: NullPointerException.

## ④ difference path and classpath.

### ▣ Path in Java.

Once after installation of Java on machine, it's required to set the PATH environment variable to conveniently run the executable (javac.exe, java.exe etc) from any directory without having to type the full path of the command such as :

C:\javac TestClass.java.

otherwise one has to specify the full path every time he/she runs :

C:\Java\jdk1.7.0\bin\javac TestClass.java.

### ▣ classpath in Java

Classpath is system environment variable used by Java Compiler and JVM. They use classpath to determine the location of required class files (.class)

So when we try to import classes and packages other than those that are available with Java standard library, JVM verifies current directory for them, if not available, it verifies in set of directories specified in "CLASSPATH" environment variable.

## ② String and String Builder

In Java Stringbuilder class is used to create mutable (modifiable) string. The Java Stringbuilder class is same as StringBuffer class except that it's non-synchronized.

### String

- ① Immutable.
- ① Not used in threaded environment
- ① slower in performance.
- ① String var = "Example";  
String var = new String  
("Example");

### StringBuilder

- ① Mutable.
- ① Used in single-threaded environment
- ① faster than String Buffer
- ① StringBuilder var = new StringBuilder  
("Example");