

C_C 的和Java的异常机制 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/144/2021_2022_C_C___E7_9A_84_E5_92_c104_144769.htm 程序总会出现异常的，需要我们去处理。C++和JAVA都有自己异常机制，我们应该遵循着去处理异常。那它们的异常机制有何异同呢？要注意一点：异常机制处理异常是要付出代价的，即异常处理的代码比无异常处理的要慢好多倍。JAVA的异常机制在面向对象的世界里，一切都是对象，JAVA的异常也不例外。API中异常类的“始祖”是 Throwable 类，有 Exception 类和 Error 类直接继承 Throwable。Error 是很严重的，是不可挽救的，我们一般是通过继承 Throwable 或 Exception 来定义自己的异常类。先看看 API（这里是从 1.5 摘抄的）里的两个异常类是怎样的

```
? import java.io.*; public class Throwable implements Serializable
...{ /** **/** use serialVersionUID from JDK 1.0.2 for
interoperability */ private static final long serialVersionUID =
-3042686055658047285L; /** **/** * Native code saves some
indication of the stack backtrace in this slot. */ private transient
Object backtrace; private String detailMessage; private Throwable
cause = this; private StackTraceElement[] stackTrace; public
Throwable() ...{ fillInStackTrace(); } public Throwable(String
message) ...{ fillInStackTrace(); detailMessage = message; } public
Throwable(String message, Throwable cause) ...{ fillInStackTrace();
detailMessage = message; this.cause = cause; } public String
getLocalizedMessage() ...{ return getMessage(); } public Throwable
getCause() ...{ return (cause==this ? null : cause); } public
```

```
synchronized Throwable initCause(Throwable cause) ...{ if
(this.cause != this) throw new IllegalStateException("Cant overwrite
cause"). if (cause == this) throw new
IllegalArgumentException("Self-causation not permitted").
this.cause = cause. return this. } public String toString() ...{ String s =
getClass().getName(). String message = getLocalizedMessage().
return (message != null) ? (s ": " message) : s. } private synchronized
StackTraceElement[] getOurStackTrace() ...{ // Initialize stack trace
if this is the first call to this method if (stackTrace == null) ...{ int
depth = getStackTraceDepth(). stackTrace = new
StackTraceElement[depth]. for (int i=0. i depth. i ) stackTrace[i] =
getStackTraceElement(i). } return stackTrace. }//.....省略了一些}
注意一点：异常类是可串行化的。来源：www.examda.com
public class Exception extends Throwable { static final long
serialVersionUID = -3387516993124229948L. public Exception() {
super(). } public Exception(String message) { super(message). }
public Exception(String message, Throwable cause) {
super(message, cause). } public Exception(Throwable cause) {
super(cause). }} 100Test 下载频道开通，各类考试题目直接下载
。详细请访问 www.100test.com
```