Neither the JAVA_HOME nor the JRE_HOME environment variable is defined 完美解决（tomcat error）

Linux下**启动和关闭tomcat报错**，如下图所示：

```
[admin@localhost bin]$ sudo ./startup.sh
Neither the JAVA_HOME nor the JRE_HOME environment variable is defined
At least one of these environment variable is needed to run this program
```

原因：
因为启动tomcat会调用tomcat安装文件中的startup.bat，而它调用了catalina.bat则调用了setclasspath.bat。因此需要在setclasspath.bat的开头手动声明环境变量。

解决方案：
用vim打开tomcat的bin目录下的setclasspath.sh，添加JAVA_HOME和JRE_HOME两个环境变量（下图红色方框内），两个环境变量路径为您安装的java JDK的路径。

root@h1:/usr/local/kencery/tomcat/bin

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```
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# limitations under the License.

# -----------------------------------------------------------------------------
#  Set JAVA_HOME or JRE_HOME if not already set and ensure any provided
#  settings are valid and consistent with the selected start-up options.

export JAVA_HOME=/usr/java/jdk1.7.0_80
export JRE_HOME=/usr/java/jdk1.7.0_80/jre

# -----------------------------------------------------------------------------

# Make sure prerequisite environment variables are set
if [ -z "$JAVA_HOME" -a -z "$JRE_HOME" ]; then
  if $darwin; then
    # Bugzilla 54390
    if [ -x '/usr/libexec/java_home' ] ; then
      export JAVA_HOME=`/usr/libexec/java_home`
    # Bugzilla 37284 (reviewed).
    elif [ -d "/System/Library/Frameworks/JavaVM.framework/Versions/CurrentJDK/Ho
 then
      export JAVA_HOME="/System/Library/Frameworks/JavaVM.framework/Versions/Curr
```

注意：一定要在setclasspath.sh文件的最开头处声明，不能是其它位置！

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保存并且退出即可。

再次使用**./startup.sh**没报错，如下图所示：

```
[admin@localhost bin]$ sudo ./startup.sh
Using CATALINA_BASE:   /usr/java/apache-tomcat-8.5.37
Using CATALINA_HOME:   /usr/java/apache-tomcat-8.5.37
Using CATALINA_TMPDIR: /usr/java/apache-tomcat-8.5.37/temp
Using JRE_HOME:        /usr/java/jdk1.8.0_201/jre
Using CLASSPATH:       /usr/java/apache-tomcat-8.5.37/bin/bootstrap.jar:/usr/jav
a/apache-tomcat-8.5.37/bin/tomcat-juli.jar
Tomcat started.
```

成功开启tomcat服务。