

Java(tm) Frequently Asked Questions(FAQ's)



Below are four Frequently Asked Question lists.

- [Comp.Lang.Java FAQ's](#)
- [General Java\(tm\)FAQ's](#)
- [Windows 95 FAQ's by D'Arcy Smith](#)
- [OS/2 FAQ's](#)

comp.lang.java FAQ

Frequently Asked Questions (FAQ) for comp.lang.java

Version 0.9

Last Update 14 Nov 1995

[Japanese Java FAQ](#)

Contributing Writers:

- Kevin M. Krom
 - W.R. Jernigan
-

Contents

[1. Newsgroup Information](#)

[1.1. Overview](#)

[1.2. History](#)

[1.3. Netiquette](#)

[2. What is Java/HotJava?](#)

[2.1. Java](#)

[2.2. HotJava](#)

[3. Is Java/HotJava Available For My OS?](#)

[3.1. Solaris](#)

[3.1.1. Solaris 2.x](#)

[3.1.2. Solaris 1.x \(SunOS\)](#)

[3.1.3. Solaris 386](#)

[3.2. Other UNIX and UNIX-like Systems](#)

[3.2.1. Linux](#)

[3.2.2. BSD Unix](#)

[3.2.3. AT&T UNIX](#)

[3.2.4. HP/UX](#)

[3.2.5. Digital UNIX](#)

[3.2.6. Novell Unixware](#)

[3.3. Windows](#)

[3.3.1. Windows NT/Windows 95](#)

[3.3.2. Windows 3.1](#)

[3.4. OS/2](#)

[3.5. Mac OS](#)

[3.6. NeXT](#)

[3.7. Amiga](#)

4. Java/HotJava Issues

4.1. Netscape 2.0 and Java

4.2. Security

4.3. Portability

4.4. Garbage Collection

4.5. Stability

4.6. Emacs

4.7. Embedded Systems

5. Where Can I Find Documentation?

5.1. Official Sun Documentation

5.2. Class Archives

5.3. Mailing List and Newsgroup Archives

5.4. Tutorials

5.5. Books and Other Publications

1. Newsgroup Information

1.1. Overview

[comp.lang.java](#) is a forum for the discussion of the Java language and Java programming. As with any Usenet newsgroup, it is recommended that new subscribers read the entire FAQ before making any postings. It is also a good idea to check the latest version of the FAQ every once in a while.

This FAQ focuses on the most common newsgroup questions relating to Java. This is intended as an introduction to the Java language and the [comp.lang.java](#) newsgroup. Other FAQs exist which deal with programming questions and issues, please read them before posting a programming question.

This FAQ also has an HTML version available. The HTML version is almost identical to the plain text version, except that it is formatted and that the HTML version is updated continuously, so it is likely to be more recent. The HTML version is available at:

<http://www.city-net.com/~krom/java-faq.html>

Versions of the FAQ prior to 1.0 are considered developmental, and may have omitted vital information. Information within this FAQ may be incorrect or outdated. Please contact the FAQ maintainer if you can help correct any mistakes or omissions. After version 1.0 is published, a revision history will be kept.

1.2. History

The seeds for this newsgroup were originally sown in a mailing list maintained by Sun, called ";java-interest";. Because of the apparent wide-spread interest in Java (the mailing list was getting very overworked!), an RFD was filed proposing the creation of a ";java"; newsgroup, under the ";comp.lang"; hierarchy, in September 1995. The eventual vote passed by about a 1000-10 margin. Since early October 1995, messages posted to ";java-interest";, ";java-porting";, and ";java-announce"; have been posted directly to [comp.lang.java](#) so there is no longer any need to join the mailing list if you can access this newsgroup. If you are currently on the mailing list, Sun has requested that you unsubscribe (following the

directions in the header of each posting) if you have access to comp.lang.java.

1.3. Netiquette

Usenet etiquette (or ";Netiquette";) is a series of posting guidelines to reduce the amount of unproductive traffic within a newsgroup. When in doubt, please be considerate of other subscribers. Here are some things to keep in mind.

- Before posting a question, please read the latest FAQ. It may spare the rest of the subscribers from reading ";When is Mac Java going to be available?"; for the N-th time. If the FAQ does not fully answer your question, or does not point you to a site, organization, or person who may give you more information, by all means post the question.
- Please visit the Sun documentation site listed at the end of this FAQ and read the available documentation. Between the FAQ and the Sun documents, most ";newbie"; questions will be fully answered.
- Do not post advertisements to this group, unless they directly relate to Java (tools, debuggers, job offers, ...) In these rare cases please direct follow-up postings to an appropriate business-related newsgroup.
- No one wants to see variations of the pyramid scam or ";Call 1-900-..."; in a technical discussion group. Inappropriate advertising will result in follow up messages to the originator's postmaster or system administrator.
- Try to keep discussions related to Java. General object-oriented discussion is fine, but should either be tied to a specific Java topic, continued by email, or taken to the appropriate newsgroup. By the same token, do not let discussions get personal. If you want to ";flame"; someone for one or more of his or her comments, direct your posting to alt.flame or take it to email.

2. What is Java/HotJava?

2.1. Java

Java is an object-oriented (OO) programming language with roots primarily in Smalltalk and Objective-C. The syntax is derived from ANSI C, with intentional differentiations (such as ";final"; instead of ";const";). Java is advertised to be simple, portable, object-oriented and secure. Java has built-in thread support and control. Java also has built in garbage collection to reclaim unused memory.

Java is a third generation language (like C++ and Smalltalk) with a built-in graphics API. Java source files are plain text saved as:

```
<classname>;.java
```

The Java compiler creates a platform-independent set of bytecodes from this file and places the bytecodes in a file called:

```
<classname>;.class
```

The Java interpreter reads in the bytecodes and converts them to native machine language at run-time. This makes Java suitable for distributed application development on a heterogeneous set of machines

(e.g., the Internet).

The most recent release of the Java API is the 1.0 beta release in the Java Developer's Kit (JDK). Some platforms have earlier versions of Java. All Sun releases of the Java/HotJava package currently contain the Java compiler and the Java run-time package.

2.2. HotJava

HotJava is a world-wide web (WWW) browser built using Java. In addition to "standard" WWW services, HotJava can execute "applets"; which are Java programs designed specifically for use in special viewers. Also, HotJava is not restricted to the pre-defined protocols (http:, ftp:, etc.), but can be extended to use new, user-defined protocols. Content handlers can also be created to deal with MIME type/subtype combinations.

HotJava has its own newsgroup (alt.www.hotjava), which may or may not be available at your site.

Applet programming discussions are reasonable topics for comp.lang.java , possibly crossposted to alt.www.hotjava as well.

3. Is Java/HotJava Available For My OS?

Time to market is a critical issue in Java development. As such, the number of officially supported platforms for the pre-1.0 releases of Java and HotJava are few. In many cases, independent porting projects are underway.

The phrase "No known port is available"; below means that I don't know about any such port -- it may exist, but no one has told me where. If you know any more information, please contact me.

3.1. Solaris

3.1.1. Solaris 2.x

The most recent version of the API (1.0 beta) is in the JDK, available from:

<http://java.sun.com/>
<ftp://java.sun.com/pub/>

The JDK does not include a HotJava browser, but it does have an applet viewer to allow users to test new applets.

3.1.2. Solaris 1.x (SunOS)

No known port is available.

3.1.3. Solaris 386

No known port is available.

3.2. Other UNIX and UNIX-like Systems

3.2.1. Linux

There is an independent porting effort for Linux. Refer to newsgroup [comp.os.linux.ports](#) for more information, or check out the following sites:

<http://www.blackdown.org/java-linux.html>

3.2.2. BSD Unix No known port is available.

3.2.3. AT&T UNIX

The Open Software Foundation (OSF) is working on a port to AT&T UNIX. For more information, see:

<http://www.gr.osf.org:8001/projects/web/java/>

3.2.4. HP/UX

The Open Software Foundation (OSF) is working on a port to HP/UX. For more information, see:

<http://www.gr.osf.org:8001/projects/web/java/>

3.2.5. Digital UNIX

The Open Software Foundation (OSF) is working on a port to Digital UNIX. For more information, see:

<http://www.gr.osf.org:8001/projects/web/java/>

3.2.6. Novell Unixware

The Open Software Foundation (OSF) is working on a port to Novell Unixware. For more information, see:

<http://www.gr.osf.org:8001/projects/web/java/>

3.3. Windows

3.3.1. Windows NT/Windows 95

The most recent version of the API is the 1.0 beta release, available in the JDK, which may be downloaded from:

<http://java.sun.com/>

<ftp://java.sun.com/pub/>

3.3.2. Windows 3.1

No known port is available. There are many problems to resolve, and since time is an issue, this has been placed on the back burner.

The problems seem to focus on multitasking support and TCP/IP stack implementation.

3.4. OS/2

IBM has supposedly ported Java to OS/2. The same rumor states that the release of OS/2 Java is pending a licensing agreement between IBM and Sun.

3.5. Mac OS

The following is a direct quote from the java-announce mailing list:

";Macintosh (MacOS 7.5): 1.0 FCS targeted for early 1996. We are unable to commit to any intermediate alpha or beta release dates at this time.";

However, there other sources of information as well. There are reports of a Mac Java soon to be available at:

<http://www.natural.com>

Also, there is supposed to be Java support in CodeWarrior by May 1996. For more information from Metrowerks, see:

<http://www.metrowerks.com/products/announce/java.html>

3.6. NeXT

There is at least one known porting effort underway, called BlackJava. For more information, see:

<ftp://ftp.informatik.uni-muenchen.de/pub/comp/platforms/next/Developer/languages/java/BlackJava.FAQ>

BlackJava source is available at:

<ftp://ftp.thoughtport.com/pub/next/Java/>

3.7. Amiga

There is an independent porting effort for Amiga. For more details, see:

<http://www.lls.se/~matjo/PJAmi/PJAmi.html>

4. Java/HotJava Issues

This section is for the most frequently mentioned issues involving Java (or HotJava as it relates to

language issues). I am constantly looking for input for new sections and improvements to the existing sections.

4.1. Netscape 2.0 and Java

Netscape 2.0 provides some support for Java applets. For now, the only supported platforms are Solaris, SunOS, Irix, Windows NT/Windows 95.

There have been widespread reports of bugs in Netscape 2.0 beta's handling of Java applets.

Given the large percentage of Netscape users who run Mac OS or Windows 3.1, it is reasonable to expect Netscape to eventually support Java on these platforms as well, but no release date is available.

Netscape 2.0beta is available for download at:

<http://home.mcom.com/comprod/mirror/index.html>
<ftp://???>

4.2. Security

There was a paper placed on the net by two Princeton graduate students (= <http://www.cs.princeton.edu/~ddean/java/>) alleging security problems in the alpha3 HotJava browser. On Nov. 8th, 1995, a response with additional comments was made by Marianne Mueller of the Java Products Group. She states, in part:

";We understand people need more information on the security model, and we're taking time right now to document the security story more rigorously. A security FAQ, an updated whitepaper, detailed user documentation and detailed implementor's documentation are all being worked on.";

4.3. Portability

Java source is compiled into machine-independent bytecodes, which are interpreted at run-time. As such, any Java application or applet may be run on any supported platform. There is some concern that the bytecodes may be reverse-engineered.

4.4. Garbage Collection

Java uses a ";mark and sweep"; method for garbage collection, not reference counting. If reference counting were used, then if class A had a reference to class B, and if class B had a reference to class A, then an orphaned A and B will each still have a reference count of 1 (each other), and would not be recycled.

4.5. Stability

Java is a language under development, currently just about to make a version 1.0 beta1 release. As such, the API is subject to change, though as a full version 1.0 release approaches, the API should become more stable. This does not mean ";frozen"; as the API can be extended without breaking the existing API.

There are significant changes from 1.0 alpha3 to 1.0 beta.

4.6. Emacs

There is a Java-sensitive Emacs mode available at:

<ftp://java.sun.com/pub/java/contrib/emacs>

4.7. Embedded Systems

There is no reason that Java could not be used in embedded systems, assuming that the effort is made to create an appropriate cross- compiler to the target system. The portability of the compiled code would be lost, but the source code would remain as portable.

Of course, using AWT graphics would require a port of the AWT library to the target system.

5. Where Can I Find Documentation?

5.1. Official Sun Documentation

<http://java.sun.com/>
<ftp://java.sun.com/docs/>

5.2. Class Archives

If you are currently archiving classes and/or applets for public use, please send me mail and I will include your site here.

- 1.0 alpha3 sites:
<http://java.sun.com/>
<http://www.gamelan.com/>
- 1.0 beta sites:
<http://java.sun.com/>
<http://www.applets.com/>
<http://www.gamelan.com/>
<http://www.javasoft.com/applets/applets.html>

5.3. Mailing List and Newsgroup Archives

- Northeast Parallel Architecture Center (NPAC) archive system
<http://asknpac.npac.syr.edu>
- J*** Notes
http://www.io.org/~mentor/J_Notes.html

5.4. Tutorials

If you are maintaining an on-line Java programming tutorial, please send me the URL and I will include it here.

5.5. Books and Other Publications

There are currently several Java books on the market, as well as several planned for release in the near future.

- *The Java Programming Language* (March 1996)
by Ken Arnold and James Gosling
ISBN 0-201-63455-4
- *The Java Language Specification* (March 1996)
by James Gosling, Bill Joy, and Guy Steele
ISBN 0-201-63451-1
- *The Java Application Programming Interface* (March 1996)
by James Gosling and The Java Team
ISBN 0-201-63453-8
- *The Java Virtual Machine Specification* (March 1996)
by Tim Lindholm, Frank Yellin, Bill Joy, and Kathy Walrath
ISBN 0-201-63452-X
- *The Java Language Tutorial: Object-Oriented Programming for the Internet* (July 1996)
by Mary Campione and Kathy Walrath
ISBN 0-201-63454-6

General FAQ's from comp.lang.java

Comp.Lang.Java.FAQ

Comp.Lang.Java.FAQ

FAQ: JAVA-General

VER: 1.02 (01FEB96)

LOC: [HTTP://www-net.com/java/faq/faq-java.txt](http://www-net.com/java/faq/faq-java.txt)

Written by D'Arcy Smith (dsh@unix.infoserve.net) Feb 1st 1996.

Please e-mail me corrections/improvements/suggestions.

* * * * *

* COMING SOON: * * * * *

* * * * *

* I'd like to start a "Known Bugs" section. If you would like * * * * *

* to e-mail me with "your very own outstanding Bug" for JDK 1.0 * * * * *

* I'll add it to the section. * * * * *

* * * * *

TOC

0. Leagal Stuff

1. Revision History

2. What Is Java (tm)?

3. What do I need to use it?
4. Where do I get it?
5. Frequently Asked Questions

Appendix A. Comercial Products Descriptions

0. Legal Stuff

"Java and HotJava are trademarks of Sun Microsystems, Inc., and refer to Sun's Java programming language and HotJava browser technologies. Comp.Lang.Java.FAQ is not sponsored by or affiliated with SUn Microsystems, Inc."

You are free to distribute this FAQ as long as this section is distributed "as is" along with it.

Please direct any questions to me (D'Arcy Smith) @ dsh@unix.infoserve.net

1. Revision History

- 1.00 (Jan 3 1996) - Created
- 1.01 (Jan 16 1996) - Minor formatting changes
 - Addition of History section
 - Addition of Appendix A
- 1.02 (Feb 1 1996) - Changed for JDK 1.0
 - Minor changes to some descriptions
 - Removed section 5 (Where can I get more info?)

2. What Is Java(tm)?

Java(tm) is an Object Oriented platform independent programming language from Sun.

3. What do I need to use it?

- The Java(tm) Developers Kit.
- A Java(tm) enabled web-browser (optional).

4. Where do I get it?

The current version of the JDK is 1.0

The JDK is currently available from the following companies:

- Sun - <http://www.javasoft.com>
- Symantec (Cafe)* - <http://www.symantec.com>

*see bottom for more description.

for the following platforms:

Solaris (SPARC)

- Sun

Windows '95

- Sun
- Symantec

Windows NT (INTEL)

- Sun
- Symantec

Java(tm) Web Browsers are available from the following companies:

Netscape - <http://home.netscape.com/>

for the following platforms:

HPUX

- Netscape

Irix

- Netscape

Linux

- Netscape

Solaris (2.3, 2.4)

- Netscape

SunOS

- Netscape

5. Frequently Asked Questions

The Questions:

- A. How do I make my members protected (like C++)

B. Why do I keep getting a "java.lang.NullPointerException" when using arrays?

C. How do I declare a constant (like C++ const) in Java(tm)?

D. How do I declare enums (like C enum) in Java(tm)?

E. Where do I get the documentation?

The Answers:

A. How do I make my members protected (like C++)

Unlike C++, protected in Java(tm) means that sub-classes AND classes in the same package have access.

eg: class A

```
{
    protected int i;
}
```

class B

```
{
    int f()
    {
        A a = new A();

        a.i = 0;          // in C++ this can't be done
    }
}
```

private protected variables do what you want though!

```
eg: class A
{
    private protected int i;
}

class B
{
    int f()
    {
        A a = new A();

        a.i = 0;        // can't do this!
    }
}
```

Java(tm) has 5 levels of protection:

- 1) public - world access
- 2) protected - package and sub-class access
- 3) default - package access (any class in the package)
- 4) private protected - class/subclass access
- 5) private - class access

B. Why do I keep getting a "java.lang.NullPointerException" when using arrays?

2 possibilities:

- 1) You've indexed past the array bounds
- 2) you haven't initialized the array correctly.

example of an incorrectly initialized array:

```
public class Test
{
    public static void main(String args[])
    {
        String sa[] = new String[5];

        sa[0].charAt(0);
    }
}
```

example of a correctly initialized array:

```
public class Test
{
    public static void main(String args[])
    {
        String sa[] = new String[5];

        for(int i = 0; i )
```

was to use interfaces:

```
"public interface TOKEN {
    public static final int IDENT = 1;
    public static final int KEYWORD = 2;
}
```

then just "implement" that interface, like:

```
public class parser implements TOKEN {  
    }  
}
```

and your methods in "parser" will be able to refer to IDENT all by itself."

Thx Patrick! (You can also use the above for constants too I'll bet)

E. Where do I get the documentation?

The documentation is available at JavaSoft:

<http://www.javasoft.com>

Many helpfull documents can be found at:

<http://www-net.com/java/faq>

Appendix A. Comercial Products Descriptions

1. Symantec's Cafe

"Symantec's Cafe is the first integrated development environment for the development of Java applets and applications for Internet World-Wide Web pages.

Cafe integrates Sun's Java Development Kit (JDK) 1.0 into Symantec's award-winning development environment for Windows 95 and Windows NT.

Cafe provides a fully featured project management system, GUI source

level graphical debugger in addition to sophisticated editing and
browsing tools for dramatically increasing the productivity of
Internet developers."

Java on OS/2 FAQ

Java on OS/2: Frequently Asked Questions

This is an attempt to bring together information on the progress on bringing the Java language to OS/2. This is only a start, but interest in this port seems to be growing rapidly, so I thought it was time to start trying to bring the subject into focus.

Q. First off, what is Java?

A. For general information on Java, check out the [comp.lang.java FAQ](#) . This is a very good introduction that contains pointers to other sources of information.

Q. How do I get a beta version of Java for OS/2?

A. The official source is the IBM web site. You will need to fill out a [registration form](#) . After successfully filling out the form, you will receive e-mail confirmation of your registration, and will be allowed to access the [development area for OS/2](#) for OS/2. Available there for download are the beta JDK itself and documentation in HTML and PostScript. You can also read the readme file to see if this is really what you want. Also, registration will automatically put you on several IBM mailing lists.

For several days, an apparent copy of this file was posted to the [Hobbes](#) archive. The file java1b1.zip, which was in the /new directory as of 1/29/96, **APPEARED** to be the same file as is available from IBM. I have downloaded this file and used it, but I have NOT confirmed that it is not virus-laden or out of date in some fashion, so use it at your own risk! This file was removed from Hobbes sometime around Jan. 31, however, at the request of IBM. According to messages on the mailing lists, IBM asked for its removal because it needs to log users of this beta. I believe this may be a requirement of the license it signed with Sun. Copies of the file are probably floating around on other sites, but it is probably a good idea to avoid unknown sources.

The consensus on the mailing list was that there was no problem with the Hobbes file, however.

Q. Didn't I see another Java file on Hobbes?

A. Yes. For a brief while on the weekend of Jan. 27-28, a file called os2java.zip or something like that was briefly on Hobbes. Those who downloaded it reported that it was the October port of the alpha-level Java code (the level that runs on Hot Java). While interesting in that the Hot Java browser is included, this code level will soon be obsolete. Alpha applets will not run on browsers (currently Netscape) that support the final API for Java.

Q. Do you have versions of Java for download on the Three Cat Software site?

A. No, and we won't. The server running these pages is fairly easy to overload. Besides, I really would suggest using the official IBM source if possible (unless you already obtained the file from Hobbes). IBM says their server should be working better now. They may set up mirror sites, however; if so I'll add those pointers here.

Q. What comes with the JDK for OS/2?

A. This file is described as being the equivalent of the first beta of the JDK for Windows NT/95. Note that Sun has now issued release 1.0 of this JDK. Included are the java interpreter, compiler, and an applet viewer (which is used to test applets that would normally be viewed by a Web browser), and all of the support files and classes needed to develop Java applets. **NOT** included is a Web browser; Hot Java, the browser written in Java, has not been ported to the beta level yet. When it has been, it presumably will

run on the OS/2 interpreter.

Q. How far along is the code?

A. The biggest gap is that the AWT (abstract windows toolkit) cannot display images yet. So none of the samples that use image files will work correctly. What you *can* do is display text, including animated text, and presumably create buttons and other GUI features (my testing of the JDK has just started, so I can't say yet how well everything works).

Q. How about a Web Explorer that does Java?

A. IBM has not given a date for release of a Web Explorer beta that can run Java applets. Aside from the obvious need to get images working, it seems that this would be not be a hard addition to make to the base product once the Java port is complete. As noted above, if the Hot Java browser is brought up to the beta code level, it should run on the OS/2 port.

Q. Is anyone else porting Java to OS/2?

A. A number of people on the OS/2 Java Porting mailing list have made progress on parts of the code. Some of their work has been posted to the [FTP site](#). The mailing list archives will give you some idea of who is working on what. However, the work by IBM seems to have generally quieted other porting efforts (although I can't speak for everyone involved).

Q. Why is this FAQ so sketchy?

A. Because I just got the beta a few days ago <:g>:. Seriously, I am looking for more information (and impressions) on Java running on OS/2. Please email me markj@3cat.com with any information you'd like to see in the FAQ.

Q. Are there any other sources of information?

A. There is now an [IBM FAQ](#) on their Java efforts. It is now small, but will probably grow. Also, keep an eye on [The Highly Unofficial IBM OS/2 Beta FAQ](#) for general information and good rumors on OS/2 beta activity. Last revised 2/01/96 by [Mark H. James](#), [/JAVAST~1/JAVADOC//index.html](#) | [Three Cat Software](#).

Window 95 FAQ's by D'Arcy Smith

FAQ: JAVA-Win '95

VER: 1.02 (01FEB96)

LOC: <http://www-net.com/java/faq/faq-java-win95.txt>

Written by D'Arcy Smith (dsh@unix.infoserve.net) Feb 1st 1996.

Please e-mail me corrections/improvements/suggestions.VER: 1.01 (16JAN96)

TOC

0. Leagal Stuff
1. Revision History
2. Frequently Asked Questions

"Java and HotJava are trademarks of Sun Microsystems, Inc., and refer to Sun's Java programming language and HotJava browser technologies. Comp.Lang.Java.FAQ is not sponsored by or affiliated with SUn Microsystems, Inc."

You are free to distributethis FAQ as long as this section is distributed "as is" along with it.

Please direct any questions to me (D'Arcy Smith) @ dsh@unix.infoserve.net

1. Revision History

1.00 (Jan 3 1996) - Created

1.01 (Jan 16 1996) - Minor formatting changes

- Addition of Sections
- Fixed CLASSPATH error
- Added Case Sensitivity

1.02 (Feb 1 1996) - Minor formatting changes

2. Frequently Asked Questions

The Questions:

1. How do I setup the JDK for Sun?
2. I don't have any buttons on the copyright notice?
3. How do I get rid of the appletviewer copyright notice screen?
4. I've got a .zip file that I got from Sun ... but pkzip won't handle the long filenames ... what can I do?
5. Whenever I try to use the appletviewer it just sits there... or it asks me to dial out to the internet - how do I stop this?
6. When I try to compile something javac tells me that "class x must be defined in a file called X.java" - how do I compile it?

The Answers:

1. How do I setup the JDK for Sun?

- a) add to you java directory a home directory (cd java; md home)
(you don't need to call it home!)
- b) in your AUTOEXEC.BAT
 - a) add java\bin to your path. (PATH=...;C:\java\bin;)

b) add SET HOME=C:\java\home

c) add SET CLASSPATH=.;C:\java\lib;C:\(wherever you want to store your classes);

c) reboot (so changes take effect)

d) goto the C:\JAVA\DEMO\Animator

e) at the command line type: appletviewer example1.html

A copyright window will come up - select the Accept button (but read the document first!)

You should have a little window with a little guy waving at you!

The little guy is Duke and he's not a tooth!

2. I don't have any buttons on the copyright notice?

Yes you do! If you can't see them ... then they are hiding behind the task bar - move the window up.

3. How do I get rid of the appletviewer copyright notice screen?

Go to the DOS prompt (a DOS Window not booting into DOS mode).

Change to the java\home directory.

Type "md .hotjava"

The next time you run the appletviewer you'll have to "accept" but after that it'll be gone.

4. I've got a .zip file that I got from Sun ... but pkzip won't handle the long filenames ... what can I do?

i) Your "unzipper" might not support Long File Names to www.winzip.com and get the 32-bit version of Winzip.

ii) You might not have Long File Name support turned on.

Go to the Control Panel (under the "Start" menu).

Select System | Performance | File System | Troubleshooting.

Make sure the "Disable Long Filename..." is not checked.

5. Whenever I try to use the appletviewer it just sits there... or it asks me to dial out to the internet - how do I stop this?

according to Rich Fritzson (sorry lost the e-mail address)

"First disable DNS in your TCP configuration: Select Control Panel, Select Network, Select TCP/IP, Select DNS tab and disable DNS.

Then reenable DNS by selecting the properties window of your dial-up networking icon, selecting TCP/IP properties and enabling DNS there."

6. When I try to compile something javac tells me that "class x must be defined in a file called X.java" - how do I compile it?

javac is Case Sensitive.

If you have a class like:

```
public class X { /*...*/ }
```

to compile it you must execute javac like:

```
javac X.java // javac x.java would look for a class called 'x'!
```

URL Not Available

file:/D:/JAVAST~1/JAVADOC//index.html

URL Not Available

file:/D:/JAVAST~1/JAVADOC/FAQ/faqclj.htm#3.2.2

URL Not Available

`ftp://ftp.informatik.uni-muenchen.de/pub/comp/platforms/next/Developer/
languages/java/BlackJava.FAQ`

URL Not Available

`ftp://ftp.mcs.com/mcsnet.users/bosch/HotJava`

URL Not Available

`ftp://ftp.thoughtport.com/pub/next/Java/`

URL Not Available

`ftp://hobbes.nmsu.edu/`

URL Not Available

`ftp://java.sun.com/docs/`

URL Not Available

`ftp://java.sun.com/pub/`

URL Not Available

`ftp://java.sun.com/pub/java/contrib/emacs`

URL Not Available

ftp://substance.blackdown.org/pub/Java>ftp://substance.blackdown.org/pub/
Java<p></dl><h5><a name=

URL Not Available

<http://asknpac.npac.syr.edu/>

URL Not Available

<http://home.mcom.com/comprod/mirror/index.html>

URL Not Available

`http://java.sun.com/`

URL Not Available

<http://ncc.hursley.ibm.com/javainfo/Developer/os2/index.html>

URL Not Available

http://ncc.hursley.ibm.com/javainfo/dev_reg.html

URL Not Available

`http://ncc.hursley.ibm.com/javainfo/faq.html`

URL Not Available

<http://sunsite.unc.edu/javafaq/javafaq.html>

URL Not Available

<http://www.applets.com/>

URL Not Available

`http://www.blackdown.org/java-linux.html`

URL Not Available

`http://www.city-net.com/~krom/java-faq.html`

URL Not Available

`http://www.cs.princeton.edu/~ddean/java/`

URL Not Available

<http://www.gamelan.com/>

URL Not Available

`http://www.gr.osf.org:8001/projects/web/java/`

URL Not Available

http://www.io.org/~mentor/J___Notes.html

URL Not Available

<http://www.javasoft.com/applets/applets.html>

URL Not Available

<http://www.l1s.se/~matjo/PJAmi/PJAmi.html>

URL Not Available

<http://www.metrowerks.com/products/announce/java.html>

URL Not Available

<http://www.natural.com/>

URL Not Available

http://www.students.uiuc.edu/~kwilas/faq_top.html

URL Not Available

<http://www.webcity.co.jp/info/andoh/java/javafaq.html>

URL Not Available

`mailto:krom@city-net.com`

URL Not Available

`mailto:markj@3cat.com`

URL Not Available

news:/alt.flame

URL Not Available

news:/alt.www.hotjava

URL Not Available

news:/comp.lang.java

