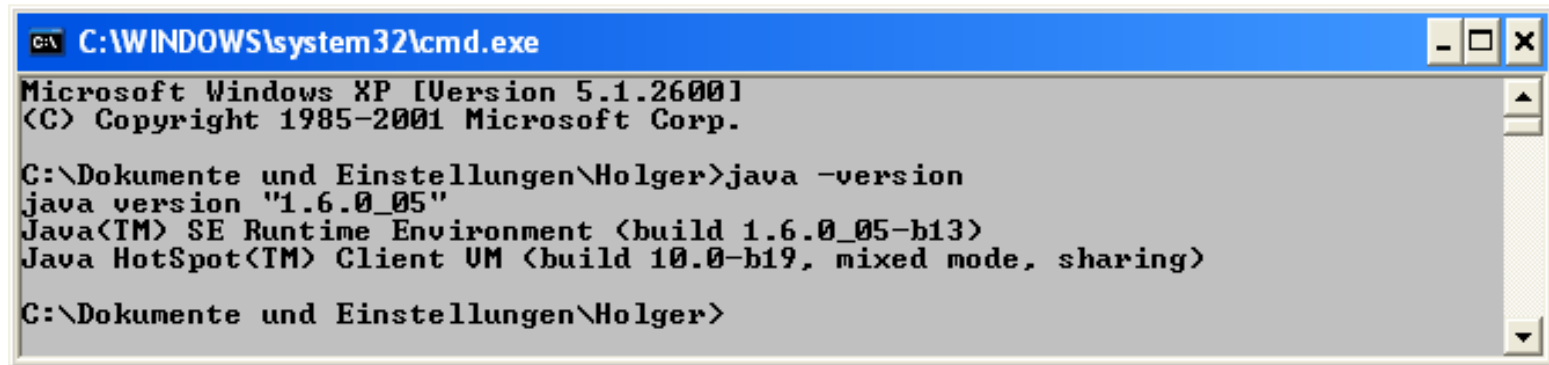


First Steps

- Check your installation by executing "java -version" on the command prompt

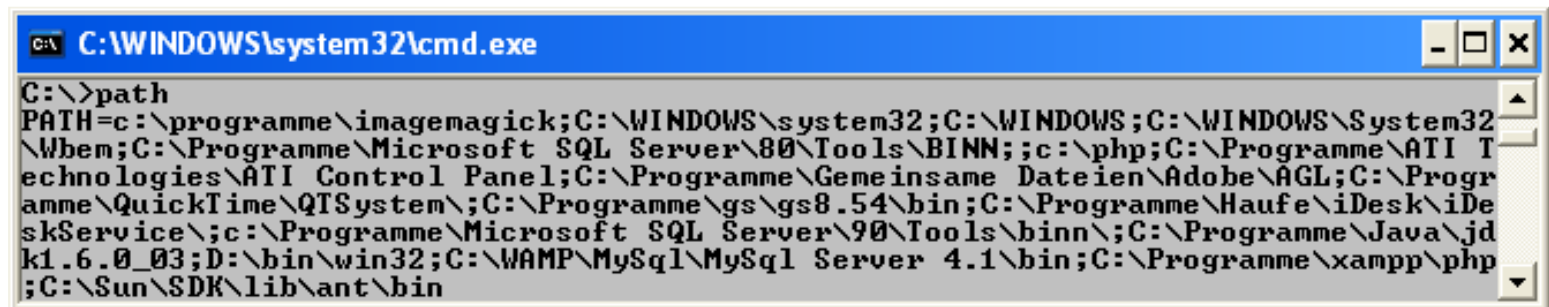


```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Dokumente und Einstellungen\Holger>java -version
java version "1.6.0_05"
Java(TM) SE Runtime Environment (build 1.6.0_05-b13)
Java HotSpot(TM) Client VM (build 10.0-b19, mixed mode, sharing)

C:\Dokumente und Einstellungen\Holger>
```

- Check your PATH environment variable



```
C:\WINDOWS\system32\cmd.exe
C:\>path
PATH=c:\programme\imagemagick;C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wbem;C:\Programme\Microsoft SQL Server\80\Tools\BINN;;c:\php;C:\Programme\ATI Technologies\ATI Control Panel;C:\Programme\Gemeinsame Dateien\Adobe\AGL;C:\Programme\QuickTime\QTSystem\;C:\Programme\gs\gs8.54\bin;C:\Programme\Haufe\iDesk\iDeskService\;c:\Programme\Microsoft SQL Server\90\Tools\bin\;C:\Programme\Java\jdk1.6.0_03;D:\bin\win32;C:\WAMP\MySQL\MySQL Server 4.1\bin;C:\Programme\xampp\php;C:\Sun\SDK\lib\ant\bin
```

Java Hello World

- Create the file Hello.java (case sensitive file name!) using a text editor (e.g., using Texpad - textpad.com, Scite - scintilla.org, or just Notepad)

```
001 /* Hello.java */
002
003 public class Hello
004 {
005     public static void main(String[] args)
006     {
007         System.out.println("Hello world!");
008     }
009 }
```

Hello World: Java vs. C

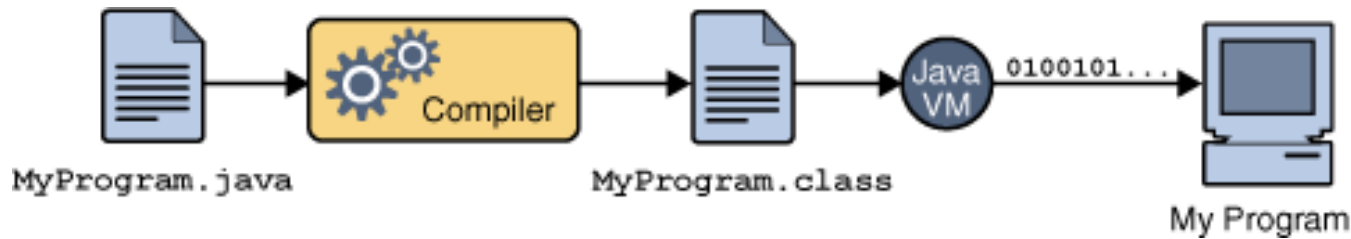
```
001 /* Hello.c */
002
003 void main()
004 {
005     printf("Hello World\n");
006 }
```

C

```
001 /* Hello.java */
002 package HelloPkg;
003 public class Hello
004 {
005     public static void main(String[] args)
006     {
007         System.out.println("Hello world");
008     }
009 }
```

Java

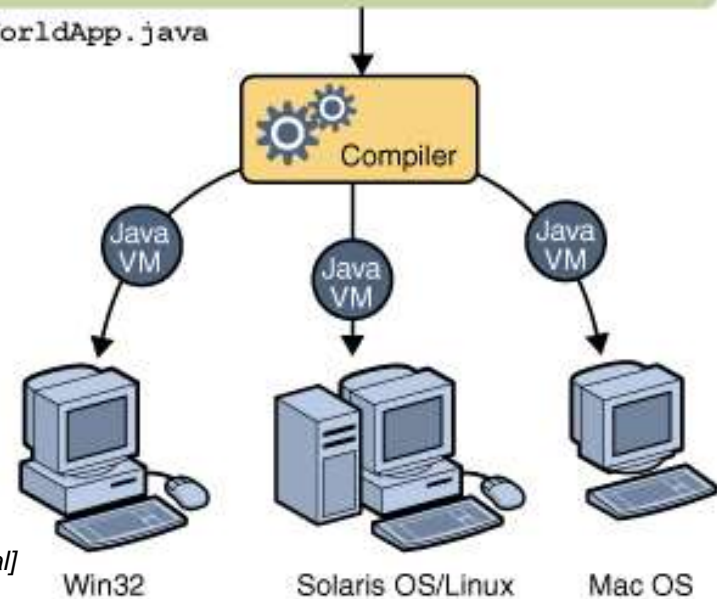
Compiling Java Code



Source Code

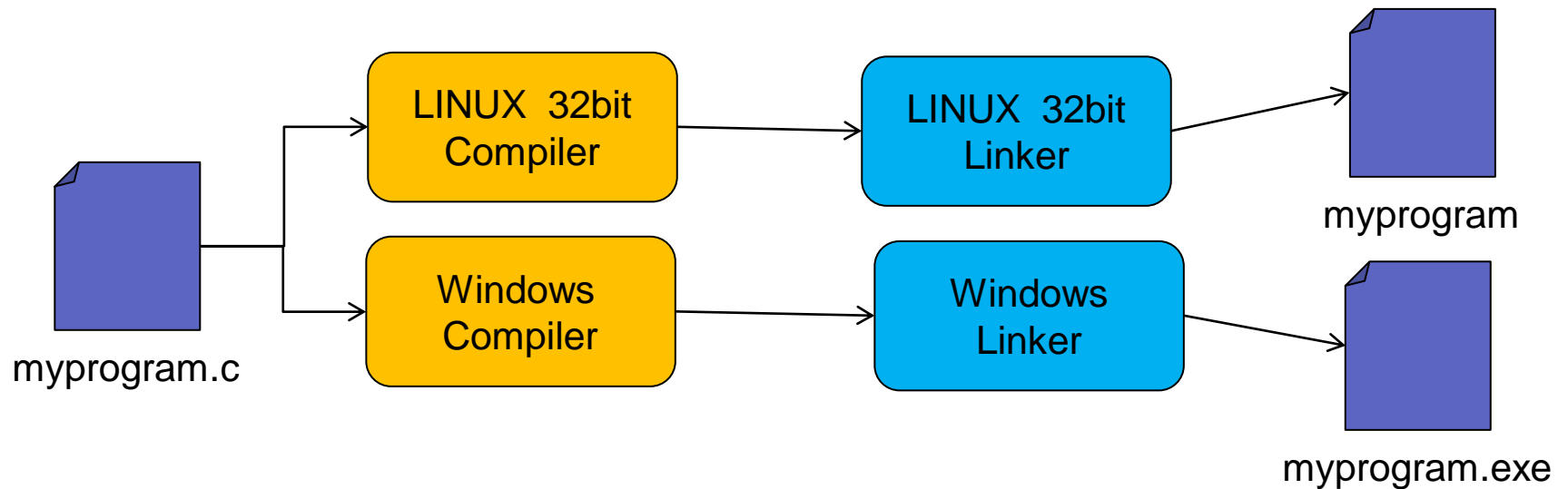
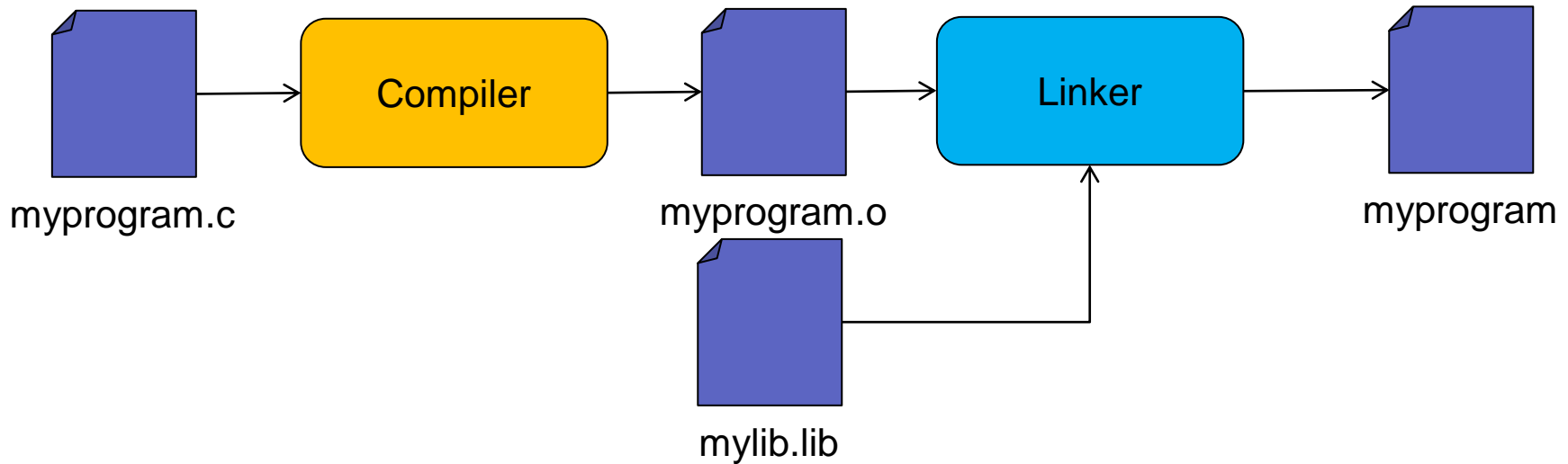
```
class HelloWorldApp {  
    public static void main(String[] args) {  
        System.out.println("Hello World!");  
    }  
}
```

HelloWorldApp.java



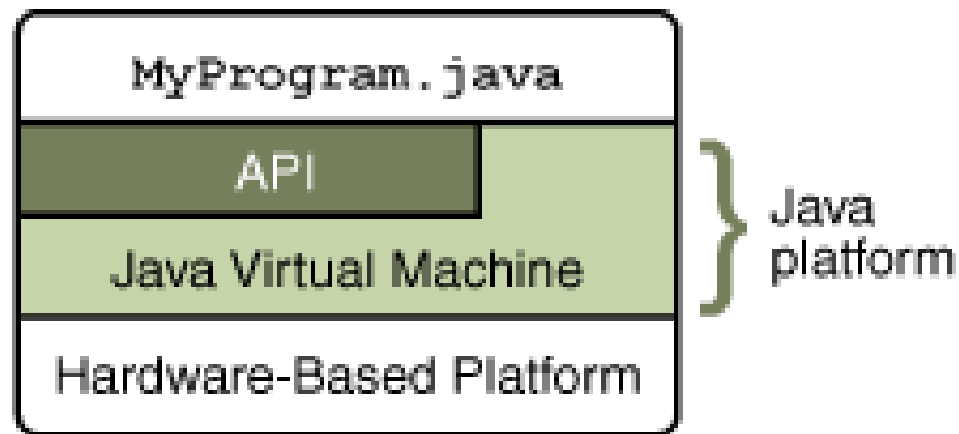
[Source: Oracle Java Tutorial]

Compiling C Code



The Java Platform

- The Java Platform defines its runtime environment
- Java is platform-independent, but depends on the Java platform



[Source: Oracle Java Tutorial]

Java Platform Components

- Development Tools
 - compiling, running, monitoring, debugging, and documenting applications
- Application Programming Interface (API)
 - Huge set of encapsulated functionality
 - Can be used within own applications
- Deployment Technologies
 - Transferring applications (development artefacts) to users
- User Interface Toolkits
 - Creation of GUIs
- Integration Libraries
 - Cross-Computer/Cross-Technology Integration (e.g., databases, remote object invocation)

Exercise 1.2