

# How do I compile for compatibility with older versions of Java?

## Question:

When I run my program with an older version of the Java runtime environment I get the following error:

```
java.lang.UnsupportedClassVersionError: ABCPROG has been compiled by a more recent version of the Java Runtime (class file version 61.0),
```

What can I do to resolve this?

How can I see the version number in the .class file?

## Answer:

You can use the -jco compiler command line option in order to specify options to be passed to the Java compiler such as:

"-source" and "-target".

For example, to compile for compatibility with Java 1.8, add the following to your compile command line

```
-jco="-source 1.8 -target 1.8"
```

To compile a program named MYPROG.cbl:

```
iscc -jco="-source 1.8" MYPROG.cbl
```

(you can omit "-target 1.8" since it is the default when specifying "-source 1.8")

Run this command to get the supported releases for the -source option

```
javac --help -source
```

In order to check the version number in a .class file you can use the javap utility that is distributed with the JDK.

For example, the following command will report the version of a program named MYPROG.

```
javap -verbose MYPROG | grep major
```

or run

```
javap -verbose MYPROG
```

and the version numbers will be reported in the first 5 lines.

Note that MYPROG.class must be in the class path.  
You can specify a class path with "javap -cp".

The major version is mapped to the Java SE version [here](#).

Online URL: <https://support.veryant.com/phpkb/article.php?id=57>