

Rapid Application Development

IS 2104

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- **2018/IS/027**
- **18020275**

Q1.

```
Command Prompt
Microsoft Windows [Version 6.3.9600]
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C:\Users\Randika>javac
Usage: javac <options> <source files>
where possible options include:
    -g                      Generate all debugging info
    -g:none                 Generate no debugging info
    -g:<lines,vars,source>  Generate only some debugging info
    -nowarn                 Generate no warnings
    -verbose               Output messages about what the compiler is doing
    -deprecation            Output source locations where deprecated APIs are used
    -classpath <path>      Specify where to find user class files and annotation processors
    -cp <path>              Specify where to find user class files and annotation processors
    -sourcepath <path>      Specify where to find input source files
    -bootclasspath <path>  Override location of bootstrap class files
    -extdirs <dirs>         Override location of installed extensions
    -endoredsdirs <dirs>   Override location of endorsed standards path
    -proc:<none,only>       Control whether annotation processing and/or compilation is done.
    -processor <class1>[,<class2>,<class3>...] Names of the annotation processors to run; bypasses default discovery process
    -processorpath <path>  Specify where to find annotation processors
    -parameters             Generate metadata for reflection on method parameters
    -d <directory>         Specify where to place generated class files
    -s <directory>         Specify where to place generated source files
    -h <directory>         Specify where to place generated native header files
    -implicit:<none,class> Specify whether or not to generate class files for implicitly referenced files
    -encoding <encoding>   Specify character encoding used by source files
    -source <release>       Provide source compatibility with specified release
    -target <release>       Generate class files for specific VM version
    -profile <profile>      Check that API used is available in the specified profile
    -version                Version information
    -help                   Print a synopsis of standard options
    -Akey[=value]           Options to pass to annotation processors
    -X                      Print a synopsis of nonstandard options
    -J<flag>                Pass <flag> directly to the runtime system
    -Werror                 Terminate compilation if warnings occur
    @<filename>             Read options and filenames from file

C:\Users\Randika>
```

Q2.

```
Command Prompt

C:\Users\Randika>SET PATH
Path=C:\Program Files\Python36\Scripts\;C:\Program Files\Python36\;C:\Program Files (x86)\Common Files\Oracle\Java\javapath;C:\Program Files (x86)\Intel\iCLS Client\;C:\Program Files\Intel\iCLS Client\;C:\Program Files\Dell\DW WLAN Card\;C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wbem;C:\WINDOWS\System32\WindowsPowerShell\v1.0\;c:\Program Files\WIDCOMM\Bluetooth Software\;c:\Program Files\WIDCOMM\Bluetooth Software\syswow64;C:\Program Files\Intel\Intel(R) Management Engine Components\DAL;C:\Program Files (x86)\Intel\Intel(R) Management Engine Components\DAL;C:\Program Files\Intel\Intel(R) Management Engine Components\IPT;C:\Program Files (x86)\Intel\Intel(R) Management Engine Components\IPT;C:\Program Files\Java\jdk1.8.0_241\bin;C:\Program Files\Java\jre1.8.0_241\bin;C:\Program Files\Git\cmd;C:\Program Files\PuTTY\;C:\Program Files\Microsoft VS Code\bin;C:\wamp64\bin\php\php7.2.14;C:\ProgramData\ComposerSetup\bin;C:\Users\Randika\AppData\Local\atom\bin;C:\Users\Randika\AppData\Roaming\Composer\vendor\bin
PATHEXT=.COM;.EXE;.BAT;.CMD;.UBS;.UBE;.JS;.JSE;.WSF;.WSH;.MSC;.PY;.PYW

C:\Users\Randika>
```

In the 11 th row,provement is there.(Java\jdk1.8.0.....)

```
Java\jdk1.8.0_241\bin;C:\Program Files\Java\jre1.8.0_241\bin;C:\Program Files\Git\cmd;C:\Program Files\PuTTY\;C:\Program Files\Microsoft VS Code\bin;C:\wamp64\bin\php\php7.2.14;C:\ProgramData\ComposerSetup\bin;C:\Users\Randika\AppData\Local\atom\bin;C:\Users\Randika\AppData\Roaming\Composer\vendor\bin
```

Q3.

```
Q3.java
1 public class Q3{
2
3     public static void main(String []args){
4
5         System.out.println("Hello,this is my first java program.");
6     }
7 }
```

Q4.

```
C:\Users\Randika\Desktop>javac Q3.java

C:\Users\Randika\Desktop>java Q3
Error: Could not find or load main class Q3

C:\Users\Randika\Desktop>javac Q3.java

C:\Users\Randika\Desktop>java Q3
Hello,this is my first java program.

C:\Users\Randika\Desktop>
```

Q5. " Java programs are compiled and interpreted"

In programming languages like C and C++, the human readable source code is converted directly into the machine readable binary code or machine code.

But in java, there is an intermediary code called Byte Code. In the compilation of the program, the java compiler converts the source code into Byte code.

In the interpretation process the JVM (Java Virtual Machine) converts the byte code into Binary code or Machine code.

Java is a compiled programming language, but rather than compile straight to executable machine code, it compiles to an intermediate binary form called JVM byte code. The byte code is then compiled and/or interpreted to run the program.

So the java programs are both compiled and interpreted.