**CLASSPATH:** CLASSPATH is an environment variable which is used by Application ClassLoader to locate and load the .class files. The CLASSPATH defines the path, to find third-party and user-defined classes that are not extensions or part of Java platform. Include all the directories which contain .class files and JAR files when setting the CLASSPATH.

You need to set the CLASSPATH if:

* You need to load a class that is not present in the current directory or any sub-directories.
* You need to load a class that is not in a location specified by the extensions mechanism.

The CLASSPATH depends on what you are setting the CLASSPATH. The CLASSPATH has a directory name or file name at the end. The following points describe what should be the end of the CLASSPATH.

* If a JAR or zip, the file contains class files, the CLASSPATH end with the name of the zip or JAR file.
* If class files placed in an unnamed package, the CLASSPATH ends with the directory that contains the class files.
* If class files placed in a named package, the CLASSPATH ends with the directory that contains the root package in the full package name, that is the first package in the full package name.

The default value of CLASSPATH is a dot (.). It means the only current directory searched. The default value of CLASSPATH overrides when you set the CLASSPATH variable or using the -classpath command (for short -cp). Put a dot (.) in the new setting if you want to include the current directory in the search path.

**How to Set CLASSPATH in Windows Using Command Prompt**

Type the following command in your Command Prompt and press enter.

set CLASSPATH=%CLASSPATH%;C:\Program Files\Java\jre1.8\rt.jar;

In the above command, The set is an internal DOS command that allows the user to change the variable value. CLASSPATH is a variable name. The variable enclosed in percentage sign (%) is an existing environment variable. The semicolon is a separator, and after the (;) there is the PATH of rt.jar file.

Difference between PATH and CLASSPATH

|  |  |
| --- | --- |
| **PATH** | **CLASSPATH** |
| PATH is an environment variable. | CLASSPATH is also an environment variable. |
| It is used by the operating system to find the executable files (.exe). | It is used by Application ClassLoader to locate the .class file. |
| You are required to include the directory which contains .exe files. | You are required to include all the directories which contain .class and JAR files. |
| PATH environment variable once set, cannot be overridden. | The CLASSPATH environment variable can be overridden by using the command line option -cp or -CLASSPATH to both javac and java command. |

To connect java application with the mysql database, **mysqlconnector.jar** file is required to be loaded.

[download the jar file mysql-connector.jar](https://static.javatpoint.com/src/jdbc/mysql-connector.jar)

### Two ways to load the jar file:

1. Paste the mysqlconnector.jar file in jre/lib/ext folder
2. Set classpath

### 1) Paste the mysqlconnector.jar file in JRE/lib/ext folder:

|  |
| --- |
| Download the mysqlconnector.jar file. Go to jre/lib/ext folder and paste the jar file here. |

### 2) Set classpath:

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| There are two ways to set the classpath:   * temporary * permanent |

### How to set the temporary classpath

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| open command prompt and write: |

1. C:>set classpath=c:\folder\mysql-connector-java-5.0.8-bin.jar;.;

### How to set the permanent classpath

Go to environment variable then click on new tab. In variable name write **classpath** and in variable value paste the path to the mysqlconnector.jar file by appending mysqlconnector.jar;.; as C:\folder\mysql-connector-java-5.0.8-bin.jar;.;