

## Software specifications

Chapter number	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	If proprietary, then cost of the software	Download links to the software	Hardware specifications	OS required
1 - 11	Java (JDK 8)	Free (Open Source)			<a href="https://www.java.com/en/download/manual.jsp">https://www.java.com/en/download/manual.jsp</a>	2 GB RAM plus	Windows/Mac/Unix like OS
1 - 11	SBT (0.13.5 & higher)	Free (Open Source)			<a href="http://www.scala-sbt.org/">http://www.scala-sbt.org/</a>		Windows/Mac/Unix like OS
1 - 11	IDE of your choice. Usually IntelliJ/Eclipse	Free			<a href="https://www.jetbrains.com/idea/download/">https://www.jetbrains.com/idea/download/</a> <a href="http://scala-ide.org/download/sdk.html">http://scala-ide.org/download/sdk.html</a>		Windows/Mac/Unix like OS
9-11	Docker	Free			<a href="https://docs.docker.com/engine/installation/">https://docs.docker.com/engine/installation/</a>		Windows/Mac/Unix like OS
	Ansible	Free					
9-11	kubectl	Free			<a href="https://kubernetes.io/docs/tasks/tools/install-kubectl/">https://kubernetes.io/docs/tasks/tools/install-kubectl/</a>		
9-11	Kubernetes (k8s)	Free		20-50\$ (hardware)	<a href="https://kubernetes.io/docs/setup/independent/create-cluster-kubeadm/">https://kubernetes.io/docs/setup/independent/create-cluster-kubeadm/</a>	AWS	Unix based (preferred)

## Detailed installation steps (software-wise)

The steps should be listed in a way that it prepares the system environment to be able to test the codes of the book.

### 1. Java

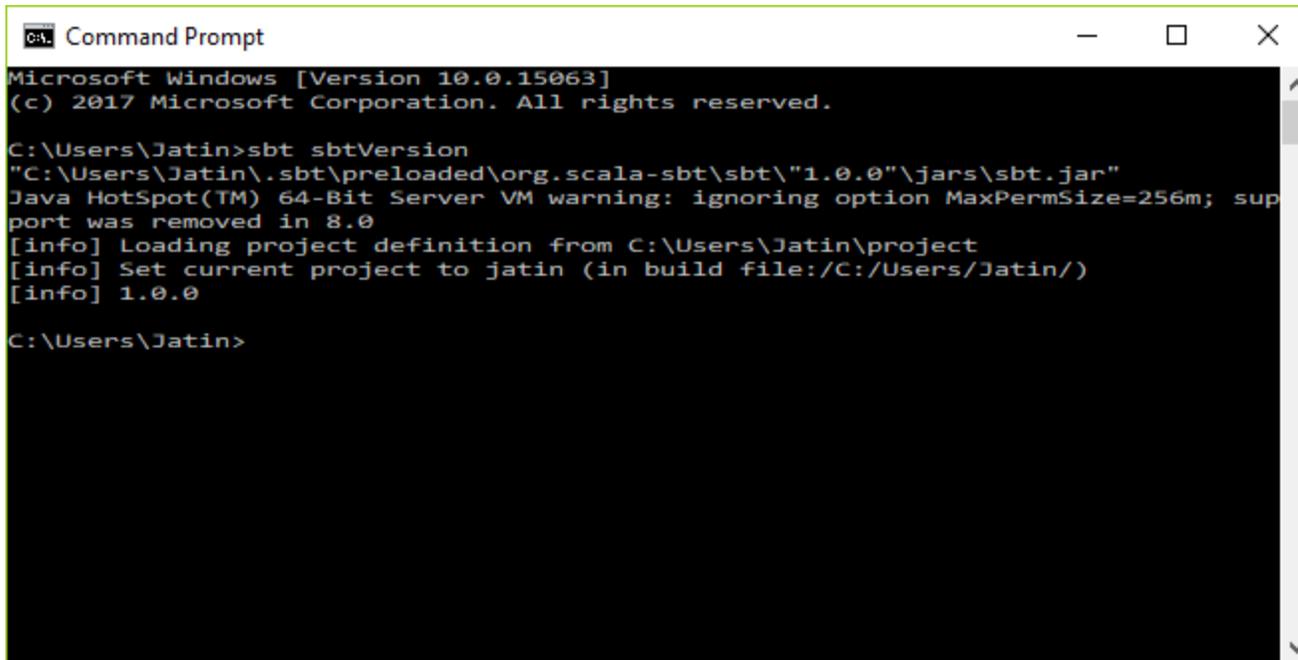
- a. Download and install Java (JDK 8 is needed).
- b. Optional: It is helpful if the JDK path is available on the environment path. To set path, please refer:
  - i. <https://www.java.com/en/download/help/path.xml>
  - ii. For windows you may also refer: <https://www.javatpoint.com/how-to-set-path-in-java>
  - iii. For linux, you may also refer: [https://www.cyberciti.biz/faq/linux-unix-set-java\\_home-path-variable/](https://www.cyberciti.biz/faq/linux-unix-set-java_home-path-variable/)

### 2. SBT:

- a. Download SBT from the links provided above
  - i. The official installation guide can be found at: <http://www.scala-sbt.org/0.13/docs/Setup.html>
  - ii. Or you could download the universal (.zip/.tgz) file from the download link. And add the path of the extracted folder (including its bin folder. For example: on windows it may be `C:\Users\username\Downloads\sbt\bin` and on linux like system: `/home/username/sbt/bin` ) to your environment path.
- b. Once you have successfully installed it, to validate the installation please open a terminal/command-line and run:

```
sbt sbtVersion
```

You would be seeing lines similar to below



```
Command Prompt
Microsoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\Jatin>sbt sbtVersion
"C:\Users\Jatin\.sbt\preloaded\org.scala-sbt\sbt\1.0.0\jars\sbt.jar"
Java HotSpot(TM) 64-Bit Server VM warning: ignoring option MaxPermSize=256m; sup
port was removed in 8.0
[info] Loading project definition from C:\Users\Jatin\project
[info] Set current project to jatin (in build file:/C:/Users/Jatin/)
[info] 1.0.0

C:\Users\Jatin>
```

3. Eclipse/Intellij
  - a. Installing via the installation build provided at the download links does the full job