Scala Hands On

# Setup Scala

Download Scala 2.11 from <http://www.scala-lang.org/download/> into your ~/Downloads directory

In a terminal execute

mkdir -p ~/Documents/tools

mv ~/Downloads/scala\*tgz ~/Documents/tools/

cd ~/Documents/tools

tar xvfz scala\*tgz

Add the following line to your ~/.bash\_profile file, correcting the version # if necessary:

export PATH=~/Documents/tools/scala-2.11.4/bin:$PATH

Quit and restart your terminal

In your terminal execute

which scala

You should see something like

/Users/emelz/Documents/tools/scala-2.11.4/bin/scala

execute

scala -version

You should see something like

Scala code runner version 2.11.4 -- Copyright 2002-2013, LAMP/EPFL

# Try the REPL

To enter the REPL, Execute

scala

Now type

1+2

you should see something like

res0: Int = 3

type

res0\*9

you should see something like

res1: Int = 27

type

System.getProperty("user.name")

type

def name = System.getProperty("user.name")

type

name

type

s"Hello $name!"

type

:quit

# Setup SBT

Download the \*tgz version of sbt from <http://www.scala-sbt.org/download.html> into your ~/Downloads directory

In a terminal execute

mv ~/Downloads/sbt\*tgz ~/Documents/tools

cd ~/Documents/tools

tar xvfz sbt\*tgz

Add the following line to your ~/.bash\_profile file:

export PATH=~/Documents/tools/sbt/bin:$PATH

Quit and restart your terminal

In your terminal execute

which sbt

You should see something like

/Users/emelz/Documents/tools/sbt/bin/sbt

execute

sbt --version

You should see something like

sbt launcher version 0.13.7

# Checkout training materials

Execute

mkdir -p ~/Documents/projects/playScala

cd ~/Documents/projects/playScala

git clone [git@gitli.corp.linkedin.com](mailto:git@gitli.corp.linkedin.com):play-scala/play-scala-materials.git

cd play-scala-materials/01\_scalaIntro

# Try the SBT console

Execute

sbt console

type

s"The time is now ${new java.util.Date()}"

type

import intro.QuicksortScalaShort.quicksort

quicksort(Array(7,3,5,1))

type

:quit

# Setup IDE

Execute

sbt gen-idea

Launch IntelliJ Idea

Close any open projects to get to the Home Screen

Select “Open Project"

In the Open Dialog, navigate to ~/Documents/projects/playScala/play-scala-materials

Select the 01\_scalaIntro folder

Click “Choose"

Open the Project Browser by clicking on the “1: Project” Icon in the left sidebar

From the File Menu, Select Project Structure

Select “Project” on the Left Hand Side

For the Project SDK dropdown, choose 1.7.0\_25 (or another JDK7 SDK)

For the Project language level dropdown, Choose 7.0

Click Apply

Click OK

Click OK when asked to reload the project

Browse the project, particularly the contents of the 01\_scalaIntro/src directory

Try the Idea Scala console

From the Run Menu choose "Edit Configurations…"

Click the + Button in the upper left

Choose “Scala Console"

In the name field, enter “Scala Intro Console"

Click Apply

Click OK

Click the Green arrow next to the “Scala Intro Console” Configuration at the top

In the Scala console at the bottom, type

def f(name: String) = s"Hello, $name"

Type Ctrl-Return to execute it (use this technique for each command)

(NOTE: If Ctrl-Return doesn’t work, try Return or Command-Return. It depends on your IntelliJ keybindings)

Type

f(System.getProperty("[user.name](http://user.name)"))

type

intro.QuicksortScalaLong.quicksort(Array(5,7,3,1))