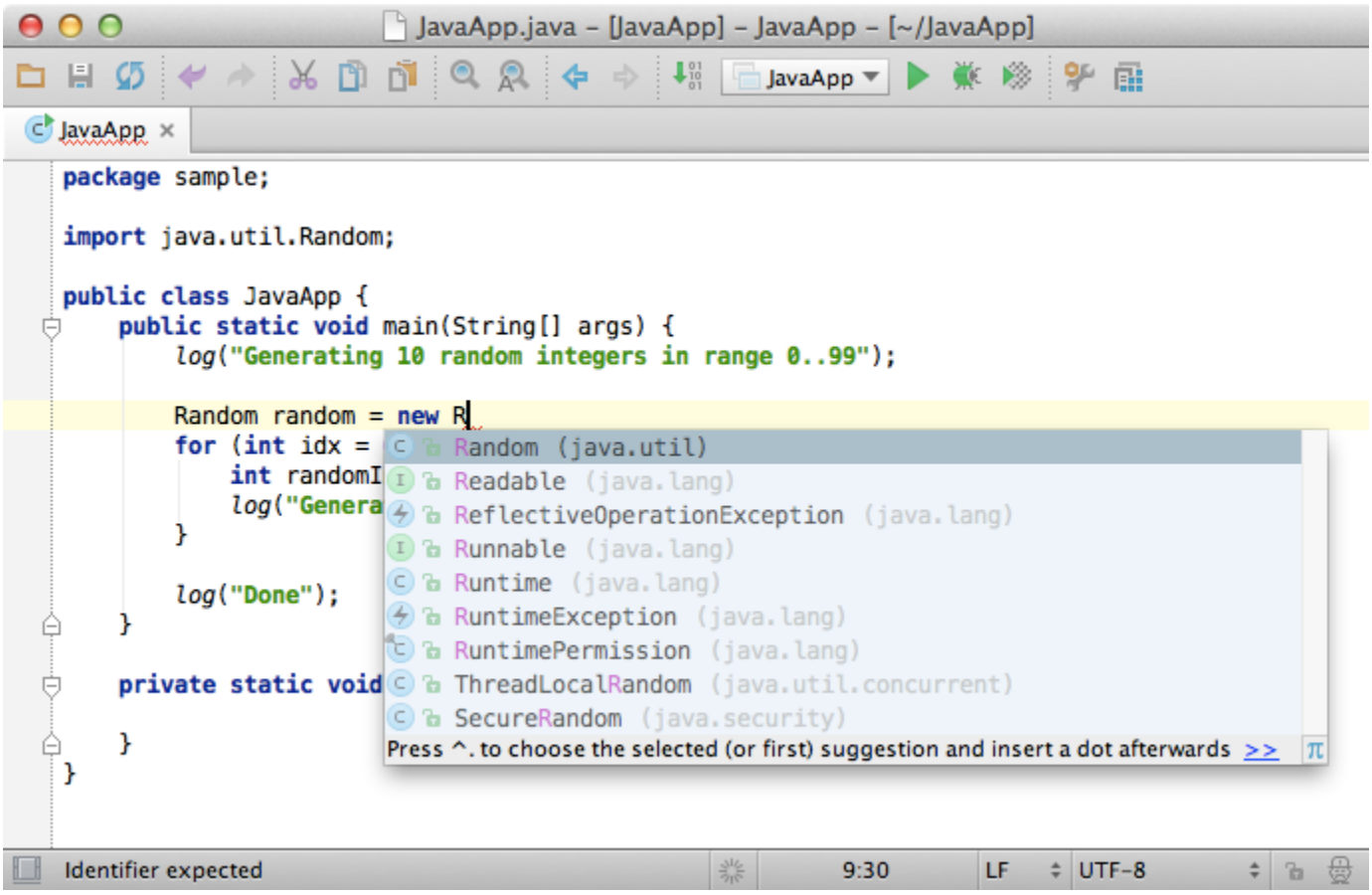
Code Completion

Redirection Notice
This page will redirect to https://www.jetbrains.com/idea/help/auto-completing-code.html.

Focused on developer productivity, IntelliJ IDEA provides powerful features for code completion. However, as there are several code completion features, it is important to learn how they work and when it's best to use each one.

1. Basic completion

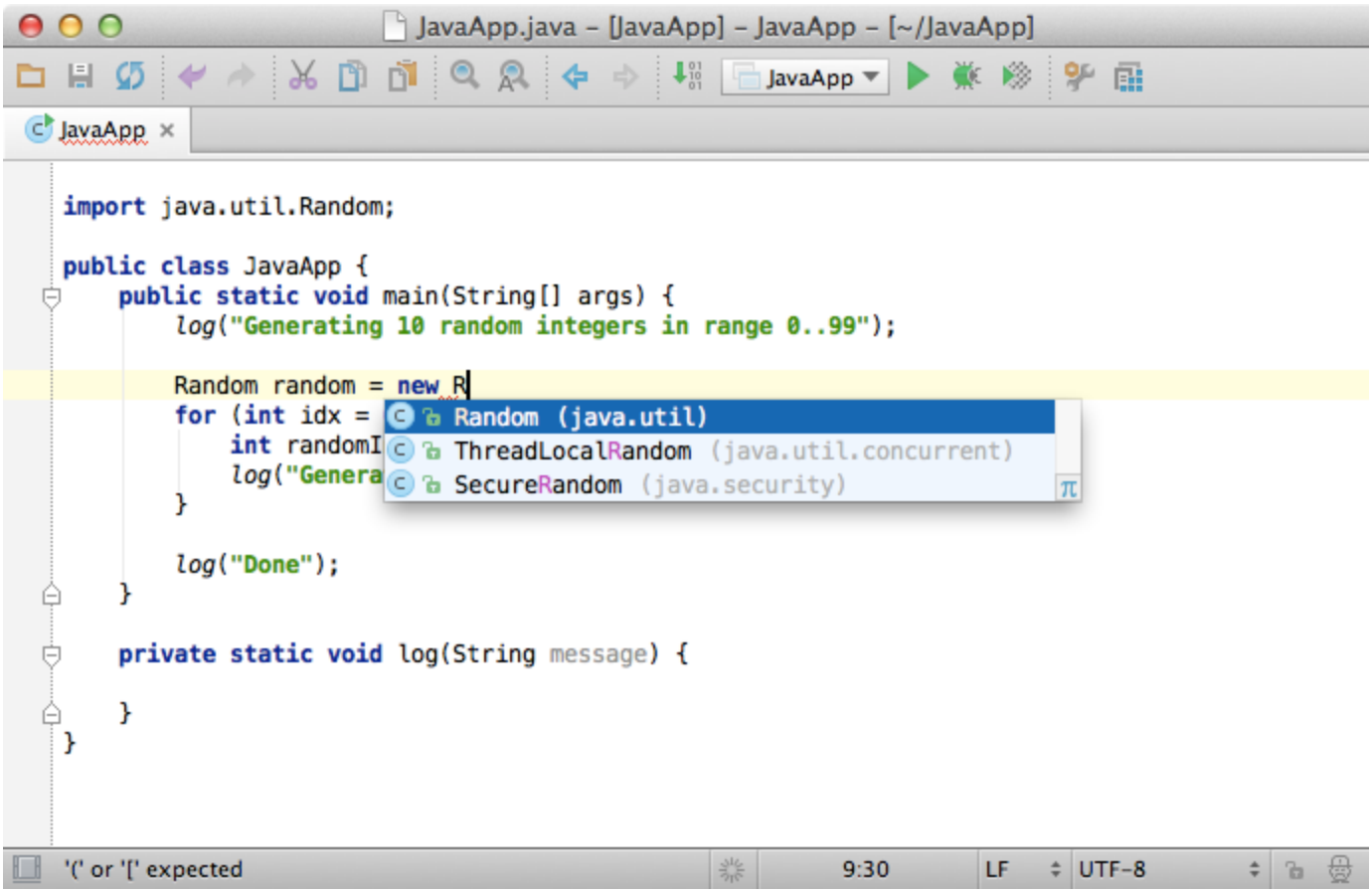
Basic completion offers most trivial suggestions for variables, types, methods, expressions, etc. It is worth mentioning that IntellIJ IDEA provides Basic completion automatically when you start typing. This means you don't need to press any shortcuts to see suggestions. But if you want to call it explicitly, simply pressCtrl+Spaceshortcut.



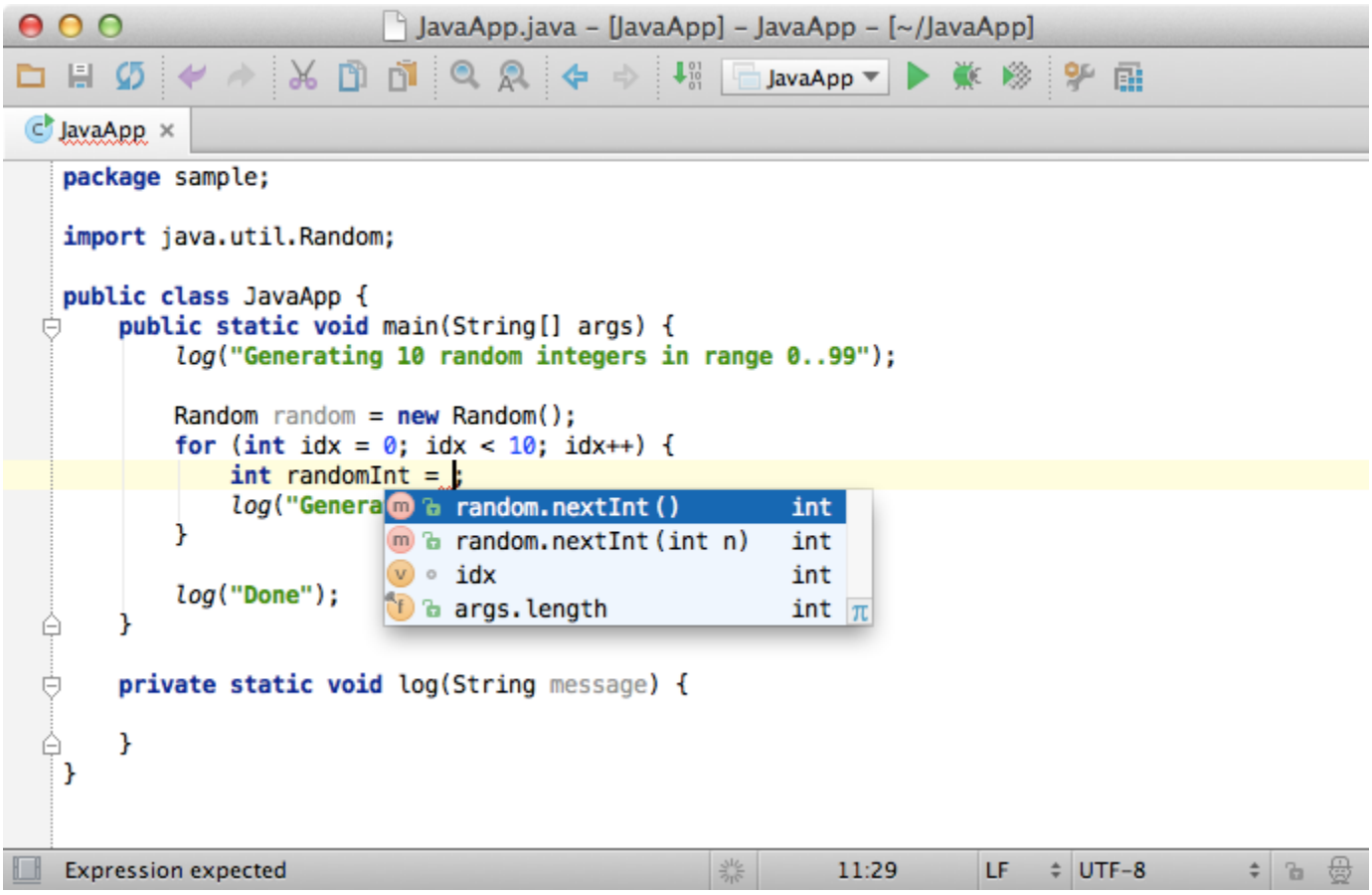
Note, when you call Basic completion twice, it shows you more results, including private members.

2. Smart completion

Additionally to Basic completion, IntelliJ IDEA provides Smart completion which is much more advanced and comprehensive. Smart completion is aware of the expected type and data flow and offers the option relevant to the context. To call Smart completion, pressShift+Ctrl+Space.

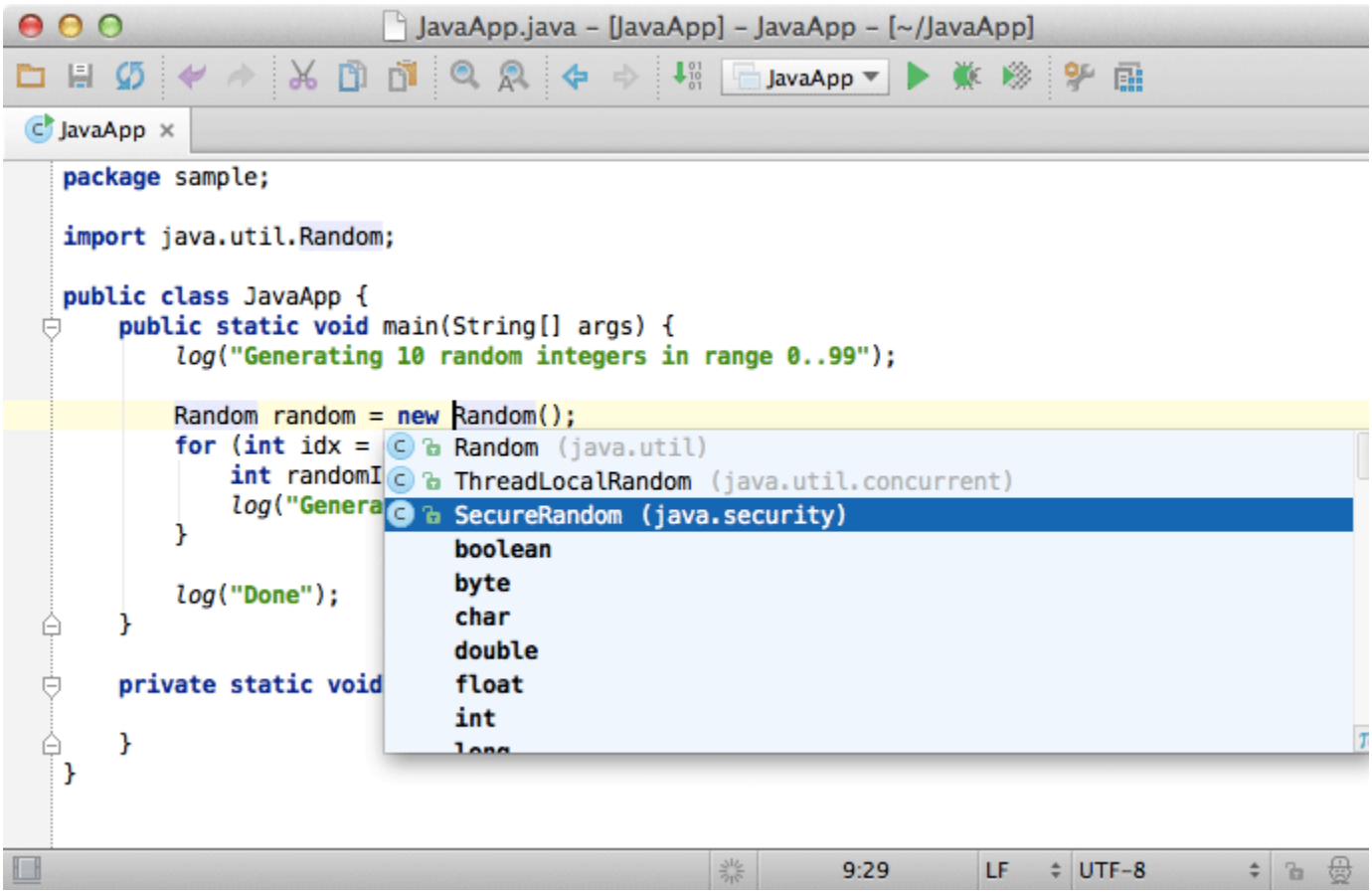


Note that when you call Smart completion twice, it shows you more results, including chains and non-imported static members.



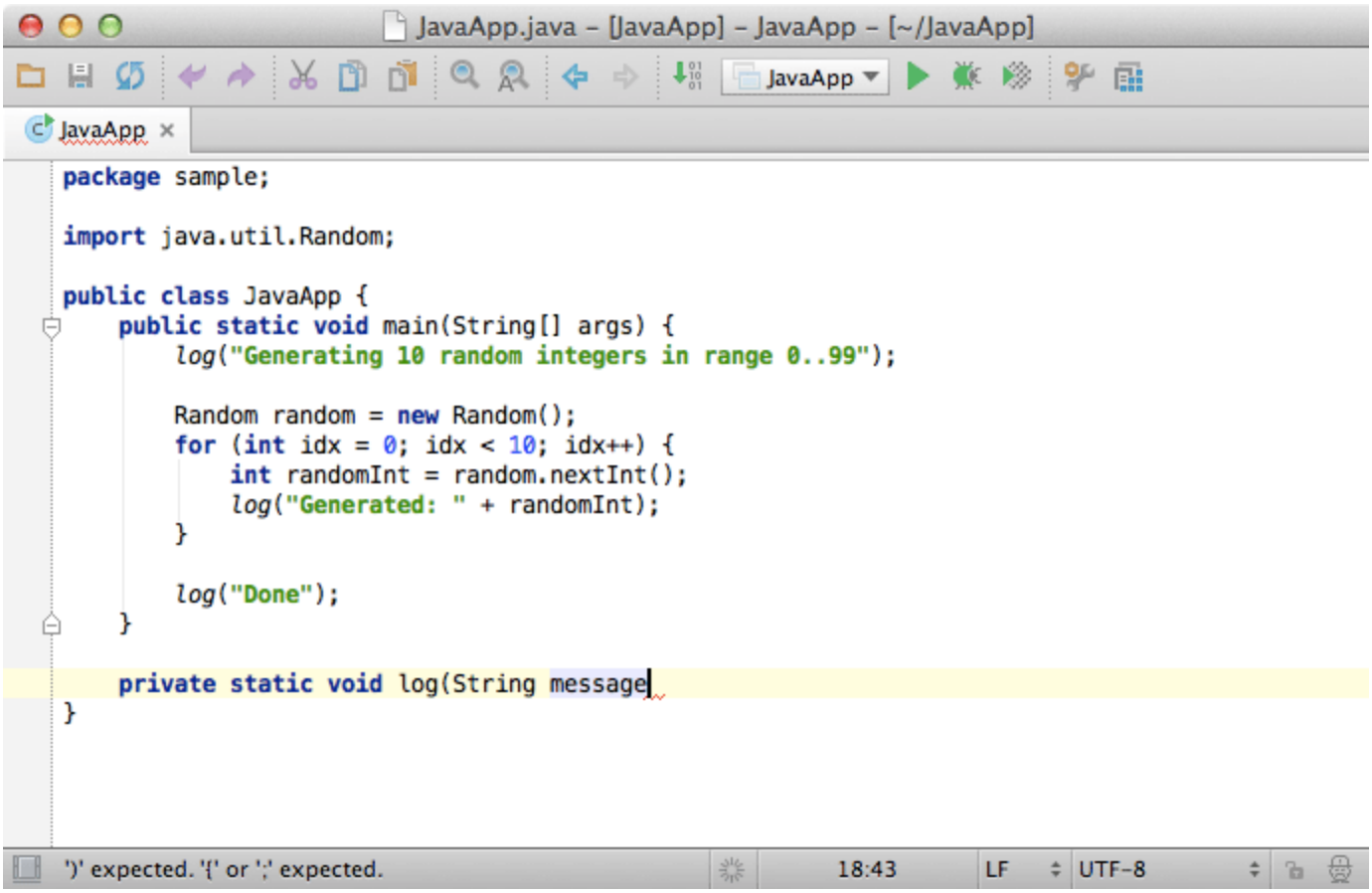
3. Completion with Tab

If you select an item from the suggestion list by clickingTab, it will overwrite the identifier at the caret, instead of just inserting the suggestion. This is helpful if you're editing a part of an identifier, such as a file name.



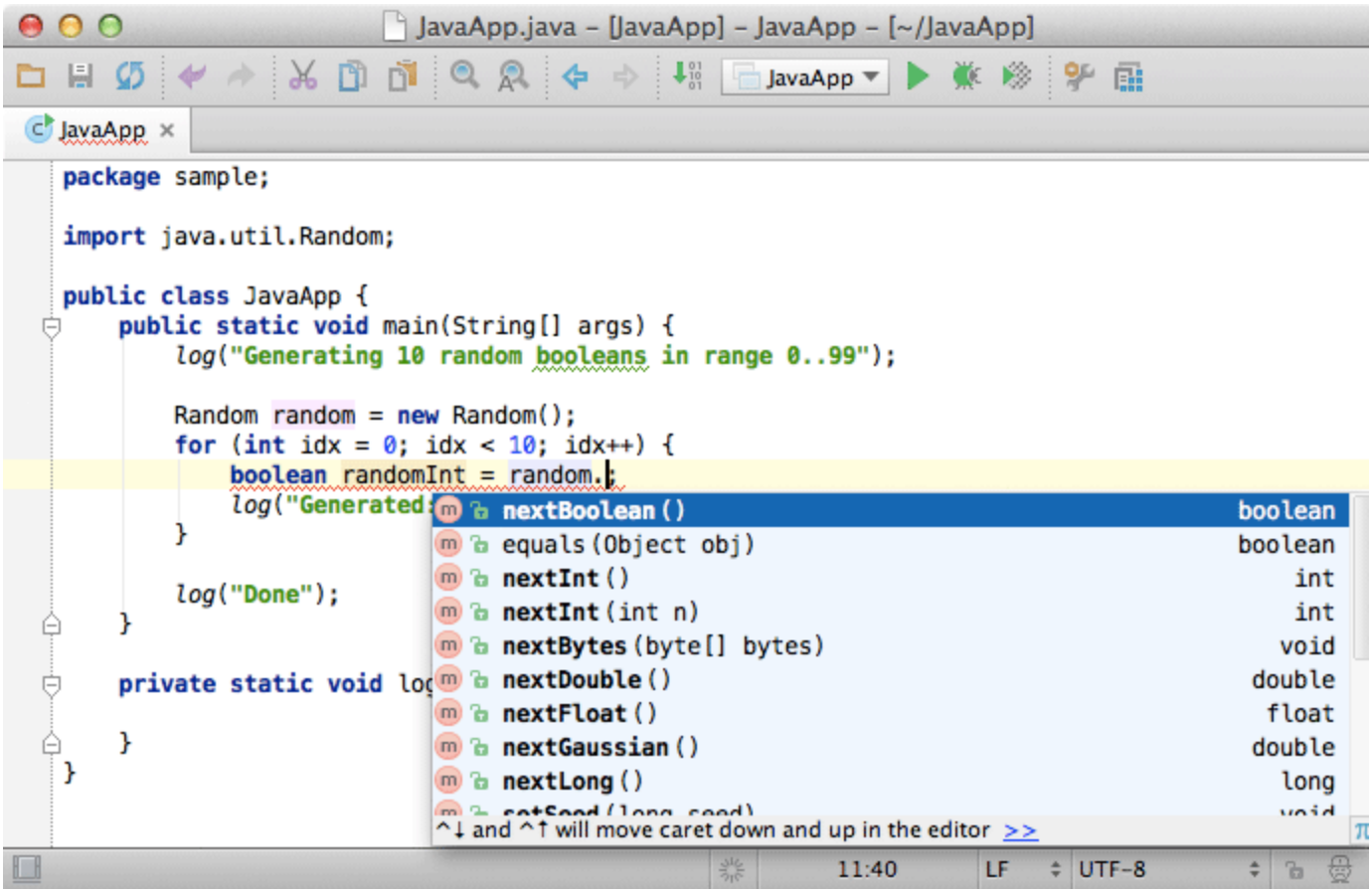
4. Statement completion

Statement completion automatically adds missing parentheses, brackets, braces and adds the necessary formatting. To complete a statement, just pressShift+Ctrl+Enter(Shift+Cmd+Enterfor Mac).



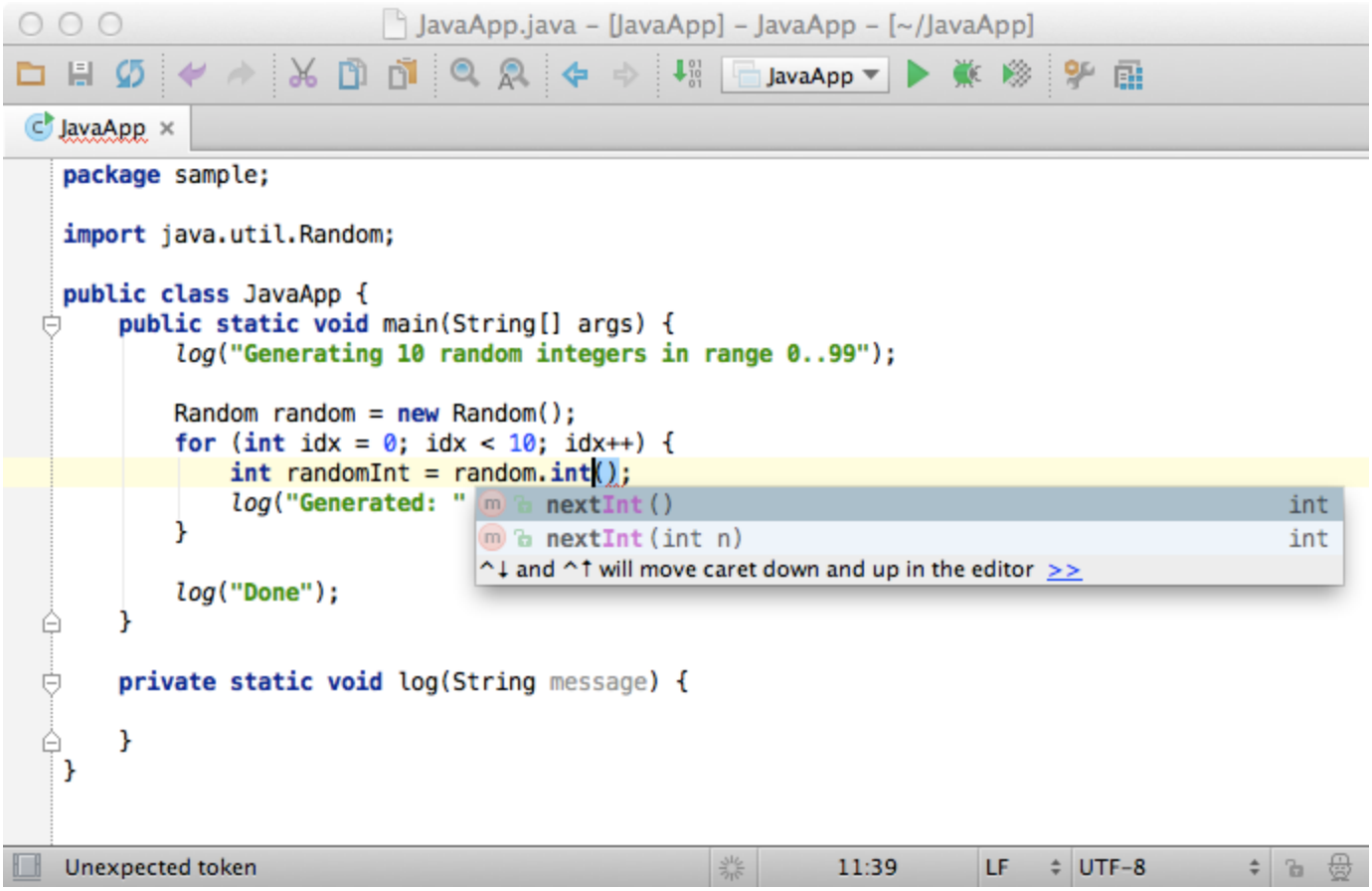
5. Negating completion

If you select a boolean item from the suggestion list with!, IntelliJ IDEA automatically adds the negation operator to the result.



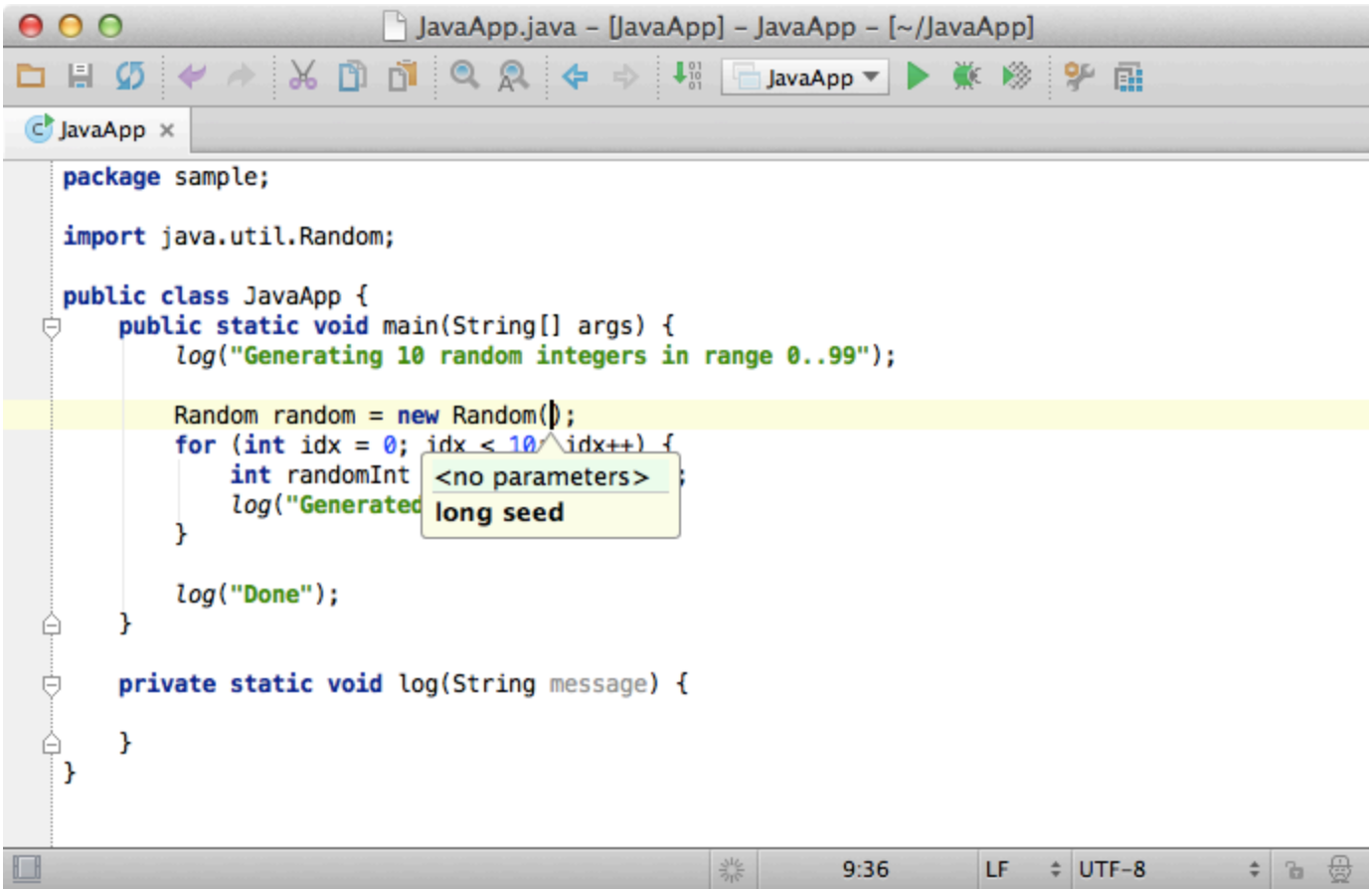
6. Middle matching

IntelliJ IDEA also supports so-called Middle matching. It means that you don’t necessarily need to type an identifier from the beginning. For example, if you only remember a part of the name, just type it and IntelliJ IDEA will still find the right matches for you.



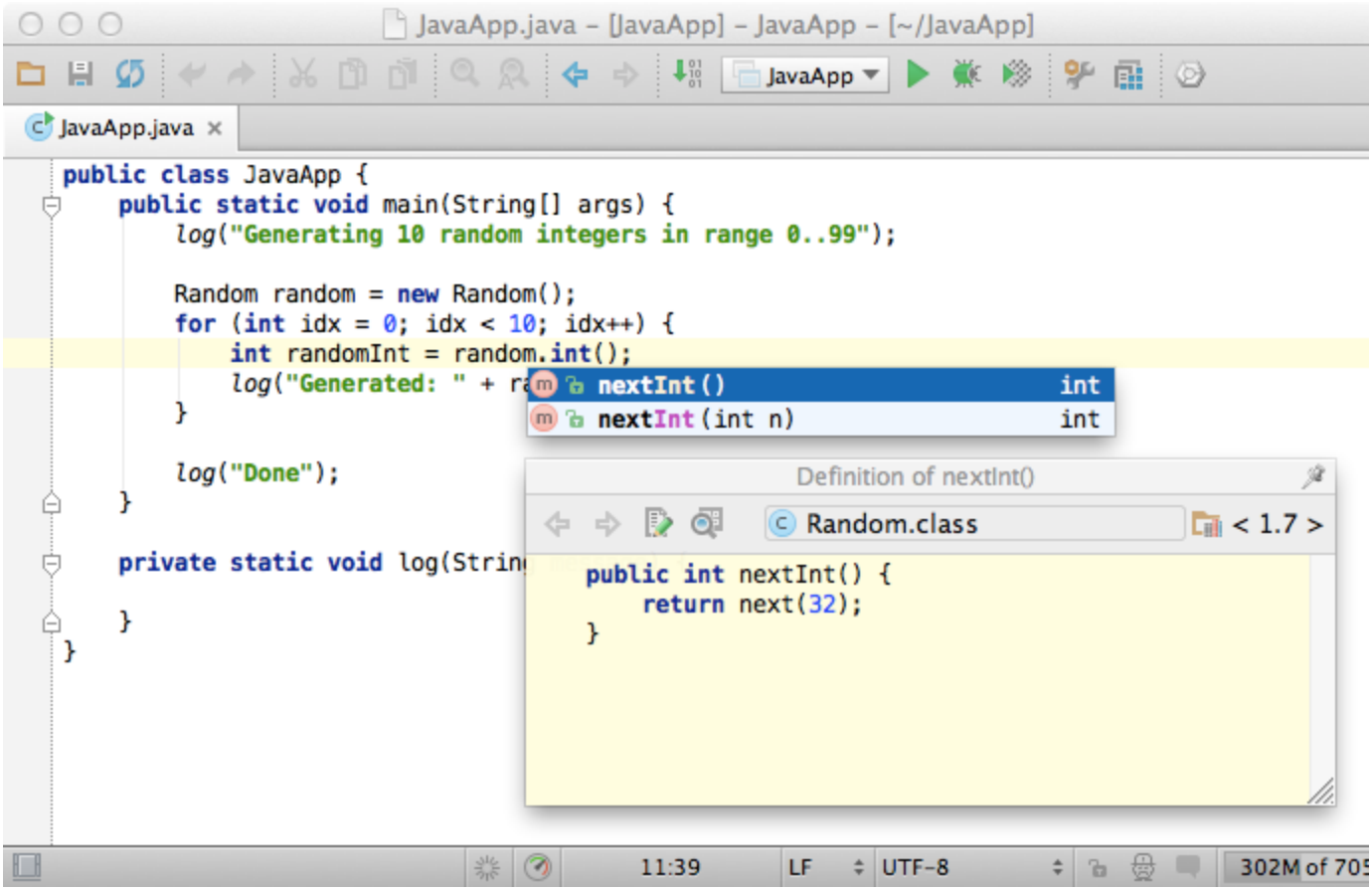
7. Parameter info

If you want to see the suggested parameters for any method or constructor, just pressCtrl+P(Cmd+Pfor Mac). IntelliJ IDEA shows parameter info for every overloaded method or constructor, and highlights the best match for the parameters already typed. This helps you to choose between overloaded options and compare your input with what's expected.



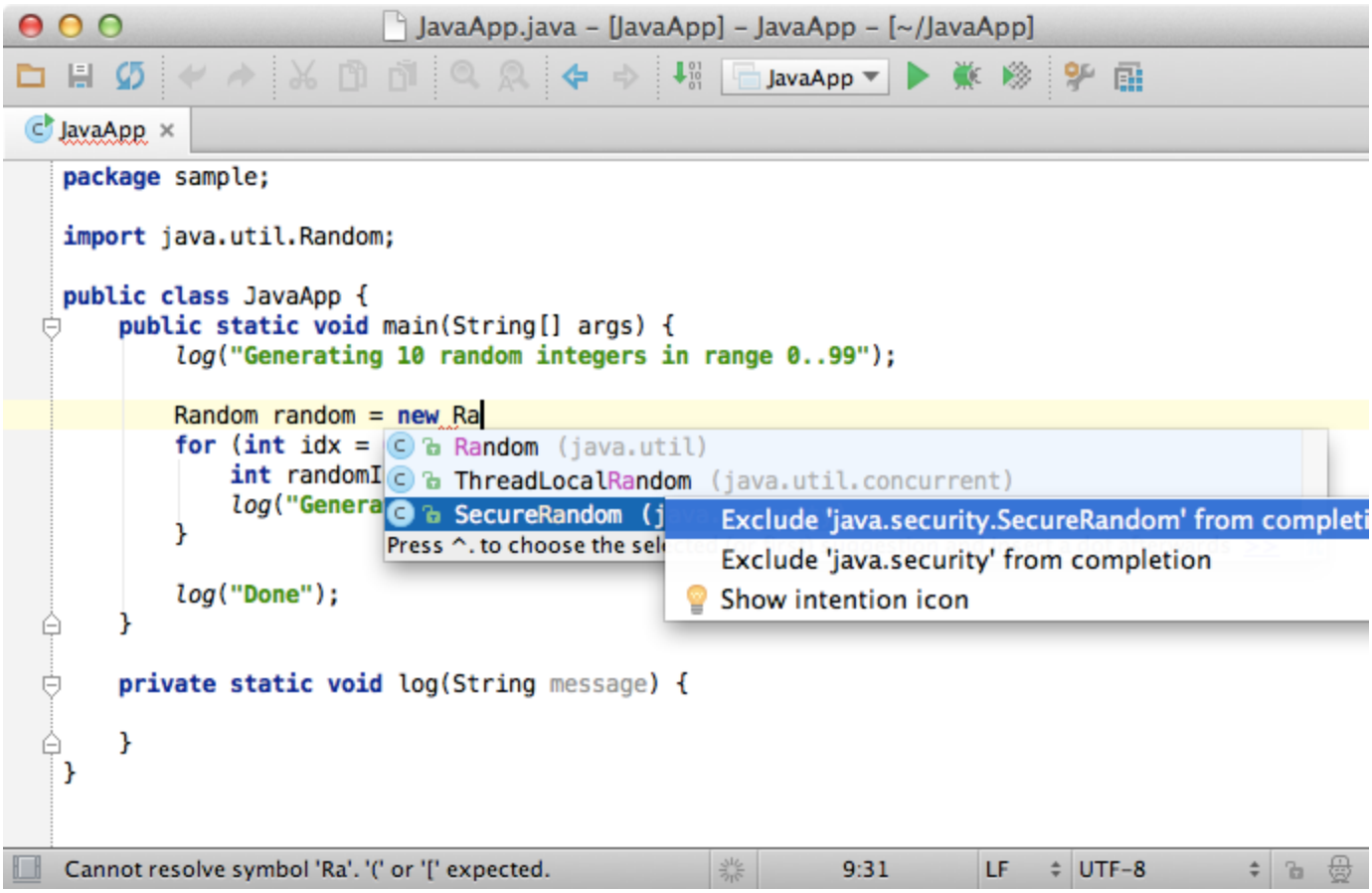
8. Quick popups

Quick popups such as Quick documentation (viaCtrl+Q, orCtrl+Jfor Mac) or Quick definition (viaShift+Ctrl+I, orShift+Cmd+Ifor Mac) are available when you browse suggestions in code completion.



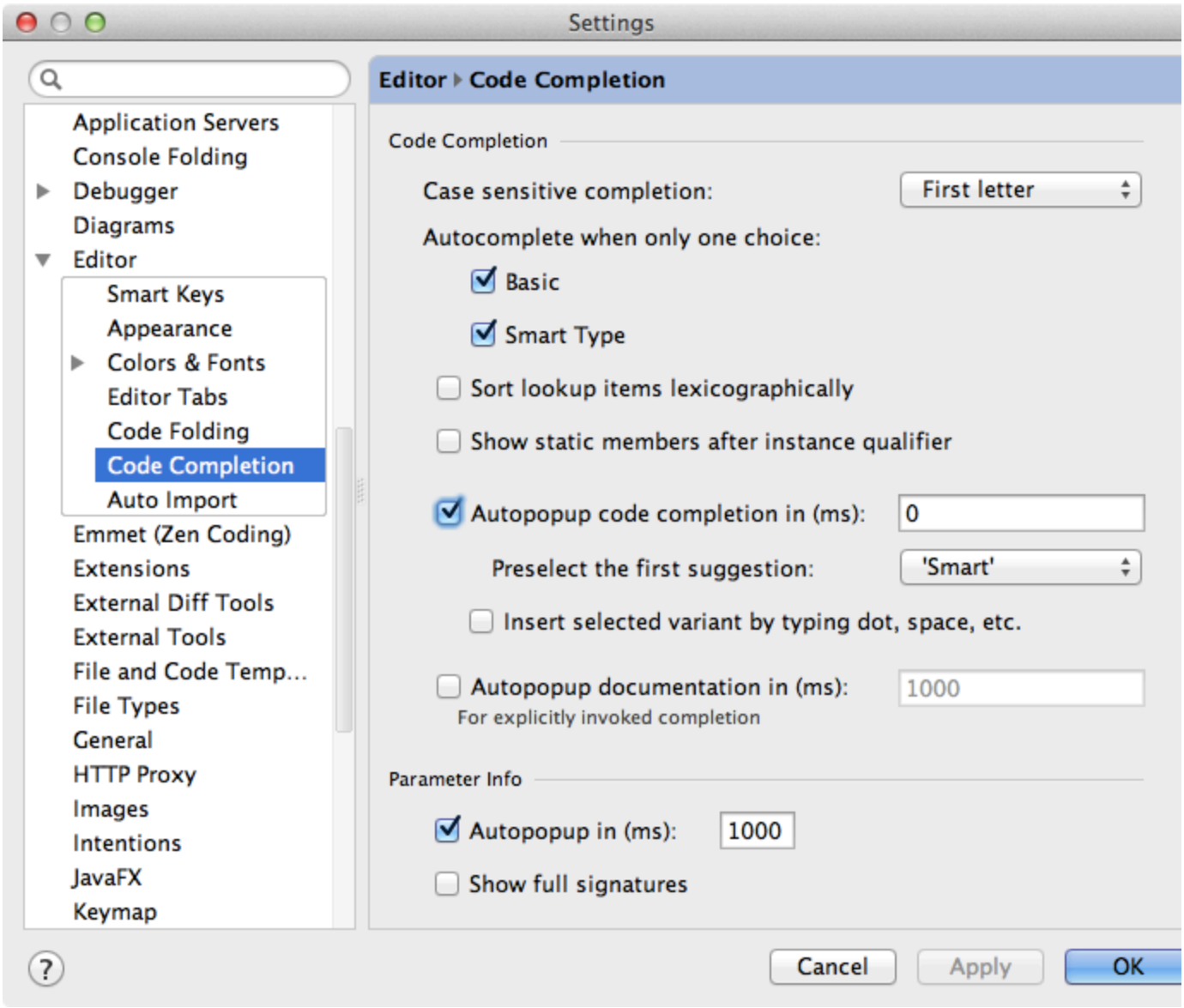
9. Exclude from completion

If you are fed up with some class constantly appearing in the suggestion list, IntelliJ IDEA can exclude this class or even a whole package so you never see it again. Just pressAlt+Enteron an item and confirm the exclusion. You can always turn it back inSettingsEditorAuto Import.



10. Completion settings

If you want to change the default settings for completion you can do it viaSettingsEditorCode Completion.


Settings
Application Servers
Console Folding
Debugger
Diagrams
Editor
Smart Keys
Appearance
Colors & Fonts
Editor Tabs
Code Folding
Code Completion
Auto Import
Emmet (Zen Coding)
Extensions
External Diff Tools
External Tools
File and Code Temp...
File Types
General
HTTP Proxy
Images
Intentions
JavaFX
Keymap
Editor ▸ Code Completion
Code Completion
Case sensitive completion:
First letter
Autocomplete when only one choice:
Basic
Smart Type
Sort lookup items lexicographically
Show static members after instance qualifier
Autopopup code completion in (ms):
0
Preselect the first suggestion:
'Smart'
Insert selected variant by typing dot, space, etc.
Autopopup documentation in (ms):
1000
For explicitly invoked completion
Parameter Info
Autopopup in (ms):
1000
Show full signatures
Cancel
Apply
OK