Appendix B: Running the LogiQL REPL

THE 1b COMMAND IS not the only way to access the LogiQL runtime engine. You can also use the interactive REPL (read-eval-print loop). REPLs exist for many languages and provide an easy-to-use means of learning a language, getting answers to modest language questions, and trying small experiments.

As the name *REPL* indicates, a REPL works by repeatedly taking the following three steps: read in a user request, evaluate its effect on the workspace, and print the results. The commands that it accepts are the same that you can give to the lb including addblock, exec, list, print, and query.

The LogiQL REPL is available for your use through a Web browser at URL http://repl.logicblox.com. (There is also a 30-minute tutorial you can try out available at URL http://developer.logicblox.com/content/docs4/ tutorial/repl/section/split.html.) When you visit the REPL Web site, you will see a page like that shown in Figure B.1.

The bottom line in the REPL is a prompt into which you can type or paste your commands. Be aware, however, that when you run the REPL, you are running with a clean workspace, and that when you are done, the contents of the workspace will disappear. If you wish to retain your work so you can continue with it later, you can click the Save button. This will download a file called workspace.db to your Web browser's *Downloads* directory. Later, you can click the Restore button, which will ask you to select one of your downloaded files into the REPL. Also, if at any time you wish to restart, you can click Clear which will place you in a pristine workspace.

As you execute commands, the REPL places its responses on lines beneath the ones on which you entered commands. For example, the screen shot in Figure B.2 shows what the REPL would look like after defining a predicate and loading some data into it.



FIGURE B.1 LogiQL REPL initial view.

	m. 1		
1	welcome to the LogicBlox playground!		
12	- addblock 'cost[icecream] = c ->		
	string(icecream), int(c),'		
=>	Succesfully added block		
/>	<pre>* exec '+cost["Fruit Sundae"] = 120.</pre>		
••	+cost["Mango Sorbet"] = 40.		
	+cost[cone chocolate] = 50.		
	+cost["Cone Chili Fries"] = 200.'		
/>	print cost		
=>	Cone Chili Fries	200	
	Cone Chocolate	50	
	Cone Vanilla	44	
	Fruit Sundae	120	
	Mango Sorbet	40	

FIGURE B.2 LogiQL REPL with predicate definition and loaded data.

For this example, three commands were entered: addblock added the cost predicate to the workspace, and exec added some facts to the predicate. Then the print command produced a table containing the current contents of the predicate. Note that scrollbars enable navigation if the size of the output is large.