

AMPL COMMAND	DESCRIPTION
<b>model filename;</b>	It loads the model from the specified file
<b>data filename;</b>	It loads instance data from the specified file
<b>option solver solvername;</b>	It allows to specify the solver to use for solving the problem. Options available: cplex, gurobi, minos, lpsolve
<b>solve;</b>	It solves the instance of the problem, given the model and the data loaded before
<b>display varname;</b>	It shows the value of the variable varname after solving the instance
<b>include filename;</b>	It allows to execute all specified commands in the indicated file
<b>reset;</b>	It completely resets every variable and parameter, both in the model and in the data files. It is also useful to solve the model several times with different solvers, in order to avoid that solutions details are automatically shared by solvers.
<b>reset data;</b>	This command resets only the information about the instance, not the model.
<b>reset data component-list;</b>	This one resets only the specified data information in the data file.
<b>update data;</b>	It updates data without deleting them.
<b>update data component-list;</b>	It updates only the specified data information in the data file.
<b>delete component-list;</b>	It deletes the list of object specified from the model of the problem, only if other items do not depend from them.
<b>purge component-list;</b>	Similar to the previous one, it also deletes elements that depend from the ones in the component-list.
<b>xref component-name;</b>	It lists elements that depend from the one indicated.
<b>redeclare declaration;</b>	To redefine an item of the model (even without deleting or purging it)
<b>fix varname := value;</b>	It fixes the indicated variable to the given value
<b>unfix varname;</b>	It frees the variable from previously set values
<b>drop constraint-name;</b>	It relaxes the specified constraints, telling the solver to ignore it while solving the problem
<b>restore constraint-name;</b>	It reintroduces the constraint previously relaxed.
<b>option relax_integrality 1;</b> <b>option relax_integrality 0;</b>	To relax or to introduce the integrality constraints
<b>option solver_msg 0;</b>	To disable message from solver
<b>option solution_precision 10;</b>	To specify the amount of significant digits in the solution
<b>let name := expression</b>	It changes the value or the definition of the object name
<b>set A;</b>	It defines a set of objects of the model which parameters and variables are based on
<b>param B;</b>	To define a parameter (i.e., constant numeric values)
<b>var X;</b>	To define a variable
<b>minimize/maximize functionname;</b>	To state the objective function of the problem
<b>subject to constraintname;</b>	To introduce a constraint
<b>for {1..n} commands filename;</b>	It repeats n times commands indicated in the specified filename
<b>If expr1 then expr2 else expr3;</b>	Conditional expression
<b>repeat while expression { ... };</b> <b>repeat until expression { ... };</b>	To repeat instructions until a certain condition or expression is verified
<b>option cplex_options 'sensitivity presolve=0';</b>	To make AMPL compute the classical sensitivity ranges
<b>display varname.rc;</b>	To display the reduced cost of varname.
<b>display varname.down; and display varname.up;</b>	To display, respectively, the lower and upper endpoints of the range of the objective-function coefficient of varname for which the current basis remains optimal
<b>display varname.current;</b>	To display the current value of the objective-function coefficient of varname
<b>display constrname;</b>	To display the shadow price of the constraint
<b>display constrname.down; and display constrname.up;</b>	To display, respectively, the lower and upper endpoints of the range of the right-hand-side of the constraint for which the current basis remains feasible, and hence optimal
<b>display constrname.current;</b>	To display the current value of the right-hand-side of the constraint
<b>display constrname.slack;</b>	To display the slack in the constraint.
<b>end;</b>	To terminate the current session in AMPL
<b>quit;</b>	To quit from the software