

## Package Distribution Application

A shipping company receives packages at its headquarters, which functions as a shipping hub. After receiving the packages, the company ships them to one of three distribution centers in WI, IL, or MO. The company needs a computer application to track the packages that pass through the hub. The application will be used by employees to browse through the current set of packages and view a list of packages destined for the specified state.

The screenshot shows a Windows-style application window titled "Package Distribution System". It contains two main panels. The left panel, titled "Package Information", displays details for a specific package: "Package # 5", "ID: Z115", "City: Edwardsville", and "State: IL". Below these fields are four buttons: "First", "Previous", "Next", and "Last". The right panel, titled "Search by state:", includes a "State:" dropdown menu currently set to "IL" and a "Search" button. Below this is a "Package Search Results:" section containing a list box with two items, "Z114" and "Z115", where "Z115" is currently selected and highlighted in blue.

Create a class named `Package` with properties `PackageID`, `DestinationCity`, and `DestinationState`. When the application form loads, create several `Package` instances and put them in an array named `packages`. If the state is not WI, IL, or MO, assign the special value "??" to the `DestinationState` property to indicate the state is unknown.

Initially, the form will display the property values of the first package. The `Next` button may be used to move to the next package in the list. The `Back` button may be used to move backward through the set of packages. The `First` and `Last` button will display the beginning and ending packages.

On the right, a group box provides a view of only the package IDs destined for a specific state. The `Search` button displays in a `ListBox` the package ID for the state specified in the `State` field. When a package is selected from the list on the right, the corresponding package detail appears on the left.