

A Simple Insertion Sort

```
isort([], []).
```

```
isort([X | Y], Z) :- isort(Y, W), place(X, W, Z).
```

```
place(X, [], [X]).
```

```
% place(X, [Y | Z], [X,Y | Z]) :- X =< Y.
```

```
% place(X, [Y | Z], [Y | W]) :- X > Y, place(X, Z, W).
```

```
% Eliminate Redundant Test
```

```
place(X, [Y | Z], [X,Y | Z]) :- X =< Y, !.
```

```
place(X, [Y | Z], [Y | W]) :- place(X, Z, W).
```

When cut (!) succeeds in the first rule for place, solving the goal that invoked the rule cannot later be attempted using the second rule for place.