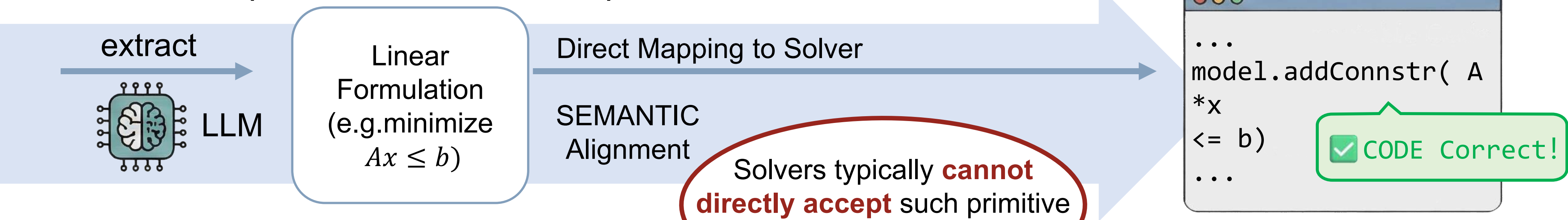


Natural Language Description

Refinery Process Production Flow

```
graph LR
    A1((Crude oil 1)) --> B[Distillation]
    A2((Crude oil 2)) --> B
    ...
```

Linear Scenario(Current methods focus)



Solvers typically **cannot directly accept** such primitive nonlinear formulation.

Nonlinear Scenario

