

```
# Import an ML model and a data set
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```
type Item = {name:String, price:f64, mass:f64};  
type Order = {id:u32, items: Vec[Item], t:Time, src_id:u32, dst_id:u32};  
type Area = {id:u32, lon:f32, lat:f32};
```

```
# Import an ML model and a data set
```

```
val model: Model[[f32;3],[f32;1]] = model(path("cost_predictor.pb"), tf());  
val areas: Set[Area] = set(path("areas.csv"), csv());
```

```
# Create an external Rust UDF for filtering
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```
— rust
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```
fn is_valid_order(o: Order) → bool { /* Rust code */ }
```

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—
```

```
from o:Order in source(kafka("127.0.0.1:9092", "orders"), json())  
where is_valid_order(o)  
join a0 in areas on a0.id = o.src_id  
join a1 in areas on a1.id = o.dst_id  
val features = [o.items.sum_by(_.mass), f32(o.t.day()), distance(a0, a1)]  
val [shipment_cost] = model.predict(features)  
select {o.id, shipment_cost}  
into sink(kafka("127.0.0.1:9092", "cost_predictions"), json());
```

