

Actividad 03

pseudo-código

```
public class Order {  
    UUID id;  
    String number;  
    List<OrderItem> items;  
    BigDecimal subtotal;  
    BigDecimal tax;  
    BigDecimal total;  
    OrderStatus status;  
    OrderOrigin origin;  
    LocalDateTime createdAt;  
    String paymentRef;  
}  
  
OrderStatus {  
    PENDING, PAID, IN_PREPARATION, READY, DELIVERED, CANCELLED  
};
```

```
public class OrderService {  
  
    private OrderRepository repository;  
    private EventPublisher publisher;  
  
    public Order createOrder(List<OrderItem> cartItems, OrderOrigin origin) {  
        validateAvailability(cartItems);  
  
        Order order = new Order();  
        order.id = UUID.randomUUID();  
        order.items = cartItems;  
        order.origin = origin;  
        order.number = generateOrderNumber();  
        order.status = OrderStatus.PENDING;  
        order.createdAt = LocalDateTime.now();  
  
        repository.save(order);  
        return order;  
    }  
  
    public void confirmPayment(UUID orderId, String paymentRef) {  
        Order order = findOrder(orderId);  
        assertStatus(order, OrderStatus.PENDING);  
    }  
}
```

```

        order.status = OrderStatus.PAID;
        order.paymentRef = paymentRef;

        repository.save(order);
        publisher.publish("order.id", order.status);
    }

    public void cancelOrder(UUID orderId) {
        Order order = repository.findOrder(orderId);

        if (order.status != OrderStatus.PENDING) {
            "Only cancellable before preparation";
        }

        order.status = OrderStatus.CANCELLED;
        repository.save(order);
        publisher.publish(order.id, order.status);
    }

    public void startPreparation(UUID orderId) {
        Order order = repository.findOrder(orderId);
        assertStatus(order, OrderStatus.PAID);

        order.status = OrderStatus.IN_PREPARATION;
        repository.save(order);
        publisher.publish(order.id, order.status);
    }

    public void markReady(UUID orderId) {
        Order order = repository.findOrder(orderId);
        assertStatus(order, OrderStatus.IN_PREPARATION);

        order.status = OrderStatus.READY;
        repository.save(order);
        publisher.publish(order.id, order.status);
    }

    public void markDelivered(UUID orderId) {
        Order order = repository.findOrder(orderId);
        assertStatus(order, OrderStatus.READY);

        order.status = OrderStatus.DELIVERED;
        repository.save(order);
        publisher.publish(order.id, order.status);
    }

    public void assertStatus(Order order, OrderStatus expected) {

```

```
        if (order.status != expected) {
            throw new InvalidTransitionException(order.status, expected);
        }
    }

    public String generateOrderNumber() {
        return prefix + dailyCounter.incrementAndGet();
    }
}
```

