

# Actividad 03

pseudo-codigo

```
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();
}
}

```

