// Create reviews

CREATE (:Review {book\_id: 1, customer\_name: "Alice", rating: 4, comment: "Great book, highly recommended!"})

CREATE (:Review {book\_id: 1, customer\_name: "Bob", rating: 5, comment: "One of the best classics I've read"})

CREATE (:Review {book\_id: 2, customer\_name: "Alice", rating: 5, comment: "Amazing storytelling, a must-read"})

CREATE (:Review {book\_id: 3, customer\_name: "Bob", rating: 4, comment: "Captivating world and characters"})

// Create discounts

CREATE (:Discount {code: "SPRING25", amount: 25})

CREATE (:Discount {code: "SUMMER20", amount: 20})

CREATE (:Discount {code: "FALL30", amount: 30})

// Create shipping providers

CREATE (:ShippingProvider {name: "UPS", service\_type: "Express"})

CREATE (:ShippingProvider {name: "FedEx", service\_type: "Standard"})

CREATE (:ShippingProvider {name: "USPS", service\_type: "Priority Mail"})

// Associate reviews with books

MATCH (r:Review), (b:Book {title: "The Great Gatsby"})

WHERE r.customer\_name IN ["Alice", "Bob"] AND b.book\_id = r.book\_id

CREATE (r)-[:FOR\_BOOK]->(b)

MATCH (r:Review), (b:Book {title: "To Kill a Mockingbird"})

WHERE r.customer\_name = "Alice" AND b.book\_id = r.book\_id

CREATE (r)-[:FOR\_BOOK]->(b)

MATCH (r:Review), (b:Book {title: "Harry Potter and the Philosopher's Stone"})

WHERE r.customer\_name = "Bob" AND b.book\_id = r.book\_id

CREATE (r)-[:FOR\_BOOK]->(b)

// Associate discounts with orders

MATCH (d:Discount {code: "SPRING25"}), (o:Order {order\_id: "ORD001"})

CREATE (o)-[:APPLIED\_DISCOUNT]->(d)

MATCH (d:Discount {code: "SUMMER20"}), (o:Order {order\_id: "ORD002"})

CREATE (o)-[:APPLIED\_DISCOUNT]->(d)

MATCH (d:Discount {code: "FALL30"}), (o:Order {order\_id: "ORD002"})

CREATE (o)-[:APPLIED\_DISCOUNT]->(d)

// Associate shipping providers with orders

MATCH (s:ShippingProvider {name: "UPS"}), (o:Order {order\_id: "ORD001"})

CREATE (o)-[:SHIPPED\_BY]->(s)

MATCH (s:ShippingProvider {name: "USPS"}), (o:Order {order\_id: "ORD001"})

CREATE (o)-[:SHIPPED\_BY]->(s)

MATCH (s:ShippingProvider {name: "FedEx"}), (o:Order {order\_id: "ORD002"})

CREATE (o)-[:SHIPPED\_BY]->(s)

// Calculate average rating per book

MATCH (b:Book)<-[:FOR\_BOOK]-(r:Review)

RETURN b.title,

AVG(r.rating) AS average\_rating,

COUNT(r) AS total\_reviews

// Calculate total discounts applied

MATCH (o:Order)-[:APPLIED\_DISCOUNT]->(d:Discount)

RETURN COUNT(d) AS total\_discounts\_applied

// Calculate total orders shipped by each provider

MATCH (s:ShippingProvider)<-[:SHIPPED\_BY]-(o:Order)

RETURN s.name,

COUNT(o) AS total\_orders\_shipped

// Calculate the total amount of discounts given

MATCH (o:Order)-[:APPLIED\_DISCOUNT]->(d:Discount)

RETURN SUM(d.amount) AS total\_discount\_amount