```
CREATE (:Product {
    id: 1,
  name: "Wonder Bread",
  quantitySold: 1000,
  price: 20,
  bestseller: "yes",
  productCategory: "Food",
  brand: "Wonder Bread",
  manufacturingDate: date("2022-01-01"),
  expiryDate: date("2023-10-01"),
  weight: 500,
  color: "Brown",
  discountRate: 10,
  availability: "In Stock"

});

CREATE (:Product {
  id: 2,
  name: "Refrigerator",
  quantitySold: 500,
  price: 40,
  bestseller: "no",
  productCategory: "Appliances",
  brand: "CoolBreeze",
  manufacturingDate: date("2022-02-15"),
  expiryDate: date("2030-02-15"),
  weight: 700,
  color: "Blue",
  discountRate: 5.0,
  availability: "Out of Stock"

});

CREATE (:Product {
    id: 3,
  name: "Sunscreen",
  quantitySold: 50000,
  price: 30,
  bestseller: "yes",
  productCategory: "Beauty and Personal Care",
  brand: "Neutrogena",
  manufacturingDate: date("2021-12-01"),
  expiryDate: date("2022-12-01"),
  weight: 1000,
  color: "white",
  discountRate: 15.0,
  availability: "In Stock"

});

CREATE (:Product {
  id: 4,
  name: "Marvel Action Figures",
```

```
  quantitySold: 20000,
  price: 50,
  bestseller: "yes",
  productCategory: "Beauty",
  brand: "Hasbro",
  manufacturingDate: date("2020-11-10"),
  expiryDate: date("2030-11-10"),
  weight: 200,
  color: "multicolor",
  discountRate: 7.5,
  availability: "In Stock"

});

CREATE (:Product {
      id: 5,
  name: "Shmapoo",
  quantitySold: 5500,
  price: 10,
  bestseller: "yes",
  productCategory: "Beauty and Personal Care",
  brand: "Pantene",
  manufacturingDate: date("2010-03-20"),
  expiryDate: date("2023-03-20"),
  weight: 20,
  color: "white",
  discountRate: 12.0,
  availability: "Out of Stock"
});




CREATE (:Customer {
  customerId: 1,
  name: "John Doe",
  email: "john.doe@gmail.com",
  age: 30,
  location: "New York",
  gender: "Male",
  subscriptionStatus: "Active",
  lastPurchaseDate: date("2023-02-10"),
  totalPurchases: 15,
  isPrimeUser: true
});

CREATE (:Customer {
  customerId: 2,
  name: "Jane Smith",
  email: "jane.smith@yahoo.com",
  age: 25,
  location: "Los Angeles",
  gender: "Female",
  subscriptionStatus: "Inactive",
  lastPurchaseDate: date("2023-01-20"),
```

```
    totalPurchases: 8,
    isPrimeUser: false
});

CREATE (:Customer {
    customerId: 3,
    name: "Bob Johnson",
    email: "bob.johnson@orkut.com",
    age: 28,
    location: "Chicago",
    gender: "Male",
    subscriptionStatus: "Active",
    lastPurchaseDate: date("2023-02-05"),
    totalPurchases: 12,
    isPrimeUser: true
});

CREATE (:Customer {
    customerId: 4,
    name: "Alice Brown",
    email: "alice.brown@example.com",
    age: 35,
    location: "Miami",
    gender: "Female",
    subscriptionStatus: "Active",
    lastPurchaseDate: date("2023-02-08"),
    totalPurchases: 20,
    isPrimeUser: true
});

CREATE (:Customer {
    customerId: 5,
    name: "Charlie Davis",
    email: "charlie.davis@yahoo.com",
    age: 22,
    location: "Seattle",
    gender: "Male",
    subscriptionStatus: "Inactive",
    lastPurchaseDate: date("2023-01-15"),
    totalPurchases: 5,
    isPrimeUser: false
});

CREATE (:Customer {
    customerId: 6,
    name: "Eva Rodriguez",
    email: "eva.rodriguez@gmail.com",
    age: 29,
    location: "Houston",
    gender: "Female",
    subscriptionStatus: "Active",
    lastPurchaseDate: date("2023-02-07"),
    totalPurchases: 18,
    isPrimeUser: true
```

```
});

CREATE (:Customer {
  customerId: 7,
  name: "Michael Wang",
  email: "michael.wang@gmail.com",
  age: 32,
  location: "San Francisco",
  gender: "Male",
  subscriptionStatus: "Active",
  lastPurchaseDate: date("2023-02-03"),
  totalPurchases: 10,
  isPrimeUser: true
});

CREATE (:Customer {
  customerId: 8,
  name: "Samantha Miller",
  email: "samantha.miller@orkut.com",
  age: 27,
  location: "Atlanta",
  gender: "Female",
  subscriptionStatus: "Inactive",
  lastPurchaseDate: date("2023-01-25"),
  totalPurchases: 7,
  isPrimeUser: false
});

CREATE (:Customer {
  customerId: 9,
  name: "David Martinez",
  email: "david.martinez@yahoo.com",
  age: 31,
  location: "Denver",
  gender: "Male",
  subscriptionStatus: "Active",
  lastPurchaseDate: date("2023-02-06"),
  totalPurchases: 14,
  isPrimeUser: true
});

CREATE (:Customer {
  customerId: 10,
  name: "Emily Thompson",
  email: "emily.thompson@gmail.com",
  age: 24,
  location: "Boston",
  gender: "Female",
  subscriptionStatus: "Active",
  lastPurchaseDate: date("2023-02-09"),
  totalPurchases: 22,
  isPrimeUser: true
});
```

```
CREATE (:Wishlist {
  wishlistId: 1,
  productName: "Smartphone",
  price: 700,
  quantity: 1,
  availability: "In Stock"
});

CREATE (:Wishlist {
  wishlistId: 2,
  productName: "Bluetooth Headphones",
  price: 100,
  quantity: 2,
  availability: "In Stock"
});

CREATE (:Wishlist {
  wishlistId: 3,
  productName: "Coffee Maker",
  price: 50,
  quantity: 1,
  availability: "In Stock"
});

CREATE (:Wishlist {
  wishlistId: 4,
  productName: "Fitness Tracker",
  price: 80,
  quantity: 1,
  availability: "In Stock"
});

CREATE (:Wishlist {
  wishlistId: 5,
  productName: "Travel Backpack",
  price: 60,
  quantity: 1,
  availability: "In Stock"
});

MATCH (c:Customer {customerId: 1})
MATCH (w:Wishlist {wishlistId: 1})
CREATE (c)-[:PRESENT_WISHLIST]->(w);

MATCH (c:Customer {customerId: 2})
MATCH (w:Wishlist {wishlistId: 2})
CREATE (c)-[:PRESENT_WISHLIST]->(w);

MATCH (c:Customer {customerId: 3})
MATCH (w:Wishlist {wishlistId: 3})
CREATE (c)-[:PRESENT_WISHLIST]->(w);
```

```
MATCH (c:Customer {customerId: 4})
MATCH (w:Wishlist {wishlistId: 4})
CREATE (c)-[:PRESENT_WISHLIST]->(w);

MATCH (c:Customer {customerId: 5})
MATCH (w:Wishlist {wishlistId: 5})
CREATE (c)-[:PRESENT_WISHLIST]->(w);


MATCH (w:Wishlist {wishlistId: 1}), (p:Product {id: 1})
CREATE (w)-[:CONTAINS]->(p);

MATCH (w:Wishlist {wishlistId: 2}), (p:Product {id: 10})
CREATE (w)-[:CONTAINS]->(p);

MATCH (w:Wishlist {wishlistId: 3}), (p:Product {id: 9})
CREATE (w)-[:CONTAINS]->(p);

MATCH (w:Wishlist {wishlistId: 4}), (p:Product {id: 3})
CREATE (w)-[:CONTAINS]->(p);

MATCH (w:Wishlist {wishlistId: 5}), (p:Product {id: 4})
CREATE (w)-[:CONTAINS]->(p);




MATCH (c:Customer {customerId: 1})
CREATE (c)-[:FEEDBACK {
  rating: 4.5,
  helpfulVotes: 12,
  unhelpfulVotes: 2
}]->(r:Review);

MATCH (c:Customer {customerId: 2})
CREATE (c)-[:FEEDBACK {
  rating: 3.8,
  helpfulVotes: 6,
  unhelpfulVotes: 1
}]->(r:Review);

MATCH (c:Customer {customerId: 3})
CREATE (c)-[:FEEDBACK {
  rating: 4.7,
  helpfulVotes: 15,
  unhelpfulVotes: 0
}]->(r:Review);

MATCH (c:Customer {customerId: 4})
CREATE (c)-[:FEEDBACK {
  rating: 2.5,
  helpfulVotes: 3,
```

```
    unhelpfulVotes: 8
}]->(r:Review);

MATCH (c:Customer {customerId: 5})
CREATE (c)-[:FEEDBACK {
  rating: 4.0,
  helpfulVotes: 10,
  unhelpfulVotes: 3
}]->(r:Review);

MATCH (c:Customer {customerId: 6})
CREATE (c)-[:FEEDBACK {
  rating: 4.2,
  helpfulVotes: 8,
  unhelpfulVotes: 1
}]->(r:Review);

MATCH (c:Customer {customerId: 7})
CREATE (c)-[:FEEDBACK {
  rating: 3.5,
  helpfulVotes: 5,
  unhelpfulVotes: 4
}]->(r:Review);

MATCH (c:Customer {customerId: 8})
CREATE (c)-[:FEEDBACK {
  rating: 4.8,
  helpfulVotes: 14,
  unhelpfulVotes: 0
}]->(r:Review);

MATCH (c:Customer {customerId: 9})
CREATE (c)-[:FEEDBACK {
  rating: 3.0,
  helpfulVotes: 2,
  unhelpfulVotes: 7
}]->(r:Review);

MATCH (c:Customer {customerId: 10})
CREATE (c)-[:FEEDBACK {
  rating: 4.5,
  helpfulVotes: 11,
  unhelpfulVotes: 1
}]->(r:Review);




MATCH (referrer:Customer {customerId: 1})
MATCH (referred:Customer {customerId: 2})
CREATE (referrer)-[:REFERRED_BY {
  referraldatetime: datetime("2023-02-12"),
  referralMethod: "Word of Mouth",
  referralReward: 10
}]->(referred)
```

```
CREATE (referred)-[:REFERRED_BY {
  referraldatetime: datetime("2023-02-12"),
  referralMethod: "Word of Mouth",
  referralReward: 10
}]->(referrer);

MATCH (referrer:Customer {customerId: 3})
MATCH (referred:Customer {customerId: 4})
CREATE (referrer)-[:REFERRED_BY {
  referraldatetime: datetime("2023-01-28"),
  referralMethod: "Online Promotion",
  referralReward: 5
}]->(referred)
CREATE (referred)-[:REFERRED_BY {
  referraldatetime: datetime("2023-01-28"),
  referralMethod: "Online Promotion",
  referralReward: 5
}]->(referrer);

MATCH (referrer:Customer {customerId: 5})
MATCH (referred:Customer {customerId: 6})
CREATE (referrer)-[:REFERRED_BY {
  referraldatetime: datetime("2023-02-05"),
  referralMethod: "Social Media",
  referralReward: 8
}]->(referred)
CREATE (referred)-[:REFERRED_BY {
  referraldatetime: datetime("2023-02-05"),
  referralMethod: "Social Media",
  referralReward: 8
}]->(referrer);

MATCH (referrer:Customer {customerId: 7})
MATCH (referred:Customer {customerId: 8})
CREATE (referrer)-[:REFERRED_BY {
  referraldatetime: datetime("2023-01-22"),
  referralMethod: "Email Campaign",
  referralReward: 15
}]->(referred)
CREATE (referred)-[:REFERRED_BY {
  referraldatetime: datetime("2023-01-22"),
  referralMethod: "Email Campaign",
  referralReward: 15
}]->(referrer);

MATCH (referrer:Customer {customerId: 9})
MATCH (referred:Customer {customerId: 10})
CREATE (referrer)-[:REFERRED_BY {
  referraldatetime: datetime("2023-02-08"),
  referralMethod: "In-Store Promotion",
  referralReward: 12
}]->(referred)
CREATE (referred)-[:REFERRED_BY {
  referraldatetime: datetime("2023-02-08"),
```

```
    referralMethod: "In-Store Promotion",
    referralReward: 12
}]->(referrer);


MATCH (p1:Product {id: 1}), (c1:Customer {customerId: 1})
CREATE (c1)-[:ADDED_TO_CART {
    quantity: 2,
    dateAdded: datetime("2023-02-11T10:30:00"),
    totalPrice: 40
}]->(p1);

MATCH (p2:Product {id: 2}), (c2:Customer {customerId: 2})
CREATE (c2)-[:ADDED_TO_CART {
    quantity: 1,
    dateAdded: datetime("2023-02-11T11:45:00"),
    totalPrice: 80
}]->(p2);

MATCH (p3:Product {id: 3}), (c3:Customer {customerId: 3})
CREATE (c3)-[:ADDED_TO_CART {
    quantity: 3,
    dateAdded: datetime("2023-02-11T12:15:00"),
    totalPrice: 90
}]->(p3);


MATCH (p4:Product {id: 4}), (c4:Customer {customerId: 4})
CREATE (c4)-[:ADDED_TO_CART {
    quantity: 2,
    dateAdded: datetime("2023-02-11T14:30:00"),
    totalPrice: 100
}]->(p4);

MATCH (p5:Product {id: 5}), (c5:Customer {customerId: 5})
CREATE (c5)-[:ADDED_TO_CART {
    quantity: 1,
    dateAdded: datetime("2023-02-11T15:45:00"),
    totalPrice: 10
}]->(p5);

MATCH (p6:Product {id: 2}), (c6:Customer {customerId: 6})
CREATE (c6)-[:ADDED_TO_CART {
    quantity: 2,
    dateAdded: datetime("2023-02-11T16:15:00"),
    totalPrice: 80
}]->(p6);

MATCH (p7:Product {id: 1}), (c7:Customer {customerId: 7})
CREATE (c7)-[:ADDED_TO_CART {
    quantity: 3,
    dateAdded: datetime("2023-02-11T17:30:00"),
    totalPrice: 60
}]->(p7);
```

```
MATCH (p8:Product {id: 3}), (c8:Customer {customerId: 8})
CREATE (c8)-[:ADDED_TO_CART {
  quantity: 1,
  dateAdded: datetime("2023-02-11T18:45:00"),
  totalPrice: 30
}]->(p8);

MATCH (p9:Product {id: 5}), (c9:Customer {customerId: 9})
CREATE (c9)-[:ADDED_TO_CART {
  quantity: 2,
  dateAdded: datetime("2023-02-11T19:15:00"),
  totalPrice: 20
}]->(p9);

MATCH (p10:Product {id: 4}), (c10:Customer {customerId: 10})
CREATE (c10)-[:ADDED_TO_CART {
  quantity: 3,
  dateAdded: datetime("2023-02-11T20:30:00"),
  totalPrice: 150
}]->(p10);




MATCH (customer:Customer {customerId: 1})
CREATE (order:Order {
  orderId: 1,
  orderDate: date("2024-02-11"),
  totalAmount: 150.50,
  products: ["Sunscreen", "Soap", "Shoes"],
  paymentMethod: "Credit Card",
  shippingAddress: "123 Main St, New York",
  status: "Processing"
})
MERGE (customer)-[:PLACED]->(order);




MATCH (order:Order {orderId: 1})
CREATE (loyaltyPoints:LoyaltyPoints {
  pointsId: 6789,
  earnedPoints: 50,
  expirationDate: date("2025-02-11"),
  redemptionStatus: "Not Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints);

MATCH (customer:Customer {customerId: 2})
CREATE (order:Order {
  orderId: 2,
  orderDate: date("2024-02-11"),
  totalAmount: 2000.50,
  products: ["Gold", "Shoes"],
  paymentMethod: "Credit Card",
```

```
    shippingAddress: "888 York",
    status: "Processing"
})
MERGE (customer)-[:PLACED]->(order);


MATCH (order:Order {orderId: 2})
CREATE (loyaltyPoints1:LoyaltyPoints {
    pointsId: 8000,
    earnedPoints: 100,
    expirationDate: date("2025-02-11"),
    redemptionStatus: "Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints1);




MATCH (customer:Customer {customerId: 3})
CREATE (order:Order {
    orderId: 3,
    orderDate: date("2024-02-11"),
    totalAmount: 9000,
    products: ["Gold"],
    paymentMethod: "Credit Card",
    shippingAddress: "888 MDF",
    status: "Processed"
})
MERGE (customer)-[:PLACED]->(order);


MATCH (order:Order {orderId: 3})
CREATE (loyaltyPoints1:LoyaltyPoints {
    pointsId: 100000,
    earnedPoints: 200,
    expirationDate: date("2025-02-11"),
    redemptionStatus: "Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints1);




MATCH (customer:Customer {customerId: 4})
CREATE (order:Order {
    orderId: 4,
    orderDate: date("2024-03-15"),
    totalAmount: 7500,
    products: ["Silver", "Diamond Ring"],
    paymentMethod: "PayPal",
    shippingAddress: "123 Sparkle St",
    status: "Shipped"
})
MERGE (customer)-[:PLACED]->(order);
```

```
MATCH (order:Order {orderId: 4})
CREATE (loyaltyPoints:LoyaltyPoints {
  pointsId: 100001,
  earnedPoints: 150,
  expirationDate: date("2025-03-15"),
  redemptionStatus: "Not Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints);


MATCH (customer:Customer {customerId: 5})
CREATE (order:Order {
  orderId: 5,
  orderDate: date("2024-04-20"),
  totalAmount: 12000,
  products: ["Platinum Necklace"],
  paymentMethod: "Credit Card",
  shippingAddress: "456 Gem Lane",
  status: "Delivered"
})
MERGE (customer)-[:PLACED]->(order);

MATCH (order:Order {orderId: 5})
CREATE (loyaltyPoints:LoyaltyPoints {
  pointsId: 100002,
  earnedPoints: 300,
  expirationDate: date("2025-04-20"),
  redemptionStatus: "Not Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints);

MATCH (customer:Customer {customerId: 6})
CREATE (order:Order {
  orderId: 6,
  orderDate: date("2024-05-25"),
  totalAmount: 5000,
  products: ["Emerald Bracelet"],
  paymentMethod: "Stripe",
  shippingAddress: "789 Jewel Ave",
  status: "Processing"
})
MERGE (customer)-[:PLACED]->(order);

MATCH (order:Order {orderId: 6})
CREATE (loyaltyPoints:LoyaltyPoints {
  pointsId: 100003,
  earnedPoints: 100,
  expirationDate: date("2025-05-25"),
  redemptionStatus: "Not Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints);

MATCH (customer:Customer {customerId: 7})
```

```
CREATE (order:Order {
  orderId: 7,
  orderDate: date("2024-06-30"),
  totalAmount: 2000,
  products: ["Sapphire Earrings"],
  paymentMethod: "PayPal",
  shippingAddress: "321 Gemstone Blvd",
  status: "Pending"
})
MERGE (customer)-[:PLACED]->(order);

MATCH (order:Order {orderId: 7})
CREATE (loyaltyPoints:LoyaltyPoints {
  pointsId: 100004,
  earnedPoints: 50,
  expirationDate: date("2025-06-30"),
  redemptionStatus: "Not Redeemed"
})
MERGE (order)-[:EARNED]->(loyaltyPoints);


MATCH (o:Order {orderId: 1})
CREATE (os1:OrderStatus {
  statusId: 4,
  status: "Delivered with Signature",
  timestamp: datetime("2024-02-17T11:30:00"),
  details: "Order has been successfully delivered with a signature.",
  location: "Customer's doorstep",
  deliveryPerson: "John Doe",
  signatureUrl: "https://example.com/signature123.png"
})
MERGE (o)-[:HAS_STATUS]->(os1);


MATCH (o:Order {orderId: 2})
CREATE (os2:OrderStatus {
  statusId: 2,
  status: "Delivered with Signature",
  timestamp: datetime("2024-01-17T11:30:00"),
  details: "Order has been successfully delivered with a signature.",
  location: "Customer's doorstep",
  deliveryPerson: "Mary Sue",
  signatureUrl: "https://example.com/signature123.png"
})
MERGE (o)-[:HAS_STATUS]->(os2);

MATCH (o:Order {orderId: 4})
CREATE (os4:OrderStatus {
  statusId: 4,
  status: "Delivered with Signature",
  timestamp: datetime("2024-01-17T11:30:00"),
  details: "Order has been successfully delivered with a signature.",
  location: "Amazon Hub",
  deliveryPerson: "Taylor Smith",
```

```
  signatureUrl: "https://example.com/signature123.png"
})
MERGE (o)-[:HAS_STATUS]->(os4);

MATCH (o:Order {orderId: 5})
CREATE (os5:OrderStatus {
  statusId: 5,
  status: "Delivered with Signature",
  timestamp: datetime("2024-01-17T11:30:00"),
  details: "Order has been successfully delivered with a signature.",
  location: "Amazon Hub",
  deliveryPerson: "Ross Smith",
  signatureUrl: "https://example.com/signature123.png"
})
MERGE (o)-[:HAS_STATUS]->(os5);

MATCH (o:Order {orderId: 6})
CREATE (os6:OrderStatus {
  statusId: 5,
  status: "Delivered with Signature",
  timestamp: datetime("2024-01-17T11:30:00"),
  details: "Order has been successfully delivered with a signature.",
  location: "Amazon Hub",
  deliveryPerson: "Nathan Smith",
  signatureUrl: "https://example.com/signature123.png"
})
MERGE (o)-[:HAS_STATUS]->(os6);


MATCH (o:Order {orderId: 7})
CREATE (os7:OrderStatus {
  statusId:7,
  status: "In Transit",
  timestamp: datetime("2024-01-17T11:30:00"),
  details: "Order on the way.",
  location: "Fedex",
  deliveryPerson: "Nathan Smith",
  signatureUrl: "https://example.com/signature123.png"
})
MERGE (o)-[:HAS_STATUS]->(os7);


MATCH (o:Order {orderId: 9})
CREATE (os9:OrderStatus {
  statusId: 9,
  status: "In Transit",
  timestamp: datetime("2024-02-18T14:00:00"),
  details: "Order on the way.",
  location: "UPS",
  deliveryPerson: "Emma Johnson",
  signatureUrl: "https://example.com/signature789.png"
})
MERGE (o)-[:HAS_STATUS]->(os9);
```

```
MATCH (o:Order {orderId: 10})
CREATE (os10:OrderStatus {
  statusId: 10,
  status: "In Transit",
  timestamp: datetime("2024-02-19T09:45:00"),
  details: "Order on the way.",
  location: "DHL",
  deliveryPerson: "Daniel Brown",
  signatureUrl: "https://example.com/signature456.png"
})
MERGE (o)-[:HAS_STATUS]->(os10);
```