UNIT TEST AND SPOCK

Finish the incomplete test cases for following:

- Order.java
- EmailService.java

ANSWERS

ANS1.

Order.java

```
Activities 🚇 IntelliJ IDEA Ultimate 🔻
                                                                                                                                                                                               Fri Mar 8, 3:03:48 PM
                                          spock-demo [-/Downloads/Assessments-master/spock-demo] - .../src/main/java/demo/domain/Order.java [spock-demo.spock-demo.main] - IntelliJ IDEA
<u>F</u>ile <u>E</u>dit <u>V</u>iew <u>N</u>avigate <u>C</u>ode Analy<u>z</u>e <u>R</u>efactor <u>B</u>uild R<u>u</u>n <u>T</u>ools VC<u>S</u> <u>W</u>indow <u>H</u>elp
 spock-demo ⟩ src ⟩ main ⟩ i java ⟩ i demo ⟩ i domain ⟩ c Order
                                                                                                                                                                                                                                                                                                                                   ⊕ 🚡 💠 — © Order.java × 💆 OrderSpec.groovy ×
        ■ Project *
                                                                                                                                  package demo.domain;
        spock-demo ~/Downloads/Assessments-n
                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
          ▶ ■ .idea
                                                                                                                                  public class Order {
           ▶ ■ gradle
                                                                                                                                          private int quantity;
private String itemName;
private double price;
private double priceWithTex;
           ▶ ■ out
            ▼ 🗎 src
                ▼ ■ main
                       ▼ ■ java
                                                                                                                                          public Order() {}
                             ▼ 🖿 demo
                                                                                                                                          public Order(int quantity, String itemName, double price) {
    this.quantity = quantity;
    this.itemName = itemName;
    this.price = price;
                                   ▼ 🖿 domain
                                          © Order

▼ I service

                                               © EmailService
                                                                                                                                                                                                                                                                                                                                                                                                                                            Ant
                                                                                                                                          public int getQuantity() { return quantity; }
                                              © OrderService
                                          BasketWeightCalculator
      Debug: 

OrderSpec ×
                                                                                                                                                                                                                                                                                                                                                                                                                            Δ -
      I : 0

√ Ø ↓ ¼² ↓□ Ξ ∴ ↑ ↓ ₺ Q ♥ ✓ Tests passed: 3 of 3 tests – 457 ms

      OrderSpec (demo.domain)

Set quantity of an item

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                             ✓ set quantity of an item✓ set item name of an item
                                                                                                                 4 ms Process finished with exit code 0
                                                                                                                                                                                                                                                                                                                                                                                                                                   =

✓ set price of an item

                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>=</u>‡

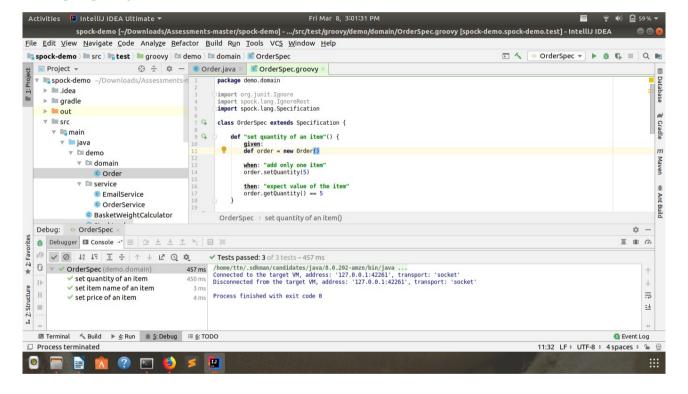
    Event Log

 ☐ Tests passed: 3 (3 minutes ago)
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                 🔚 📴 🛕 🕐 🔼
```

```
package demo.domain;
public class Order {
    private int quantity;
    private String itemName;
    private double price;
    private double priceWithTex;
    public Order() {}
    public Order(int quantity, String itemName, double price) {
         this.quantity = quantity;
         this.itemName = itemName;
         this.price = price;
    }
    public int getQuantity() {
         return quantity;
    }
    public Order setQuantity(int quantity) {
         this.quantity = quantity;
         return this;
    public String getItemName() {
         return itemName;
    public Order setItemName(String itemName) {
         this.itemName = itemName;
```

```
return this:
    }
    public double getPrice() {
         return price;
    public Order setPrice(double price) {
         this.price = price;
         return this:
    }
    public double getPriceWithTex() {
         return priceWithTex;
    }
    public Order setPriceWithTex(double priceWithTex) {
         this.priceWithTex = priceWithTex;
         return this;
    }
}
```

OderSpec.groovy



```
package demo.domain
import org.junit.Ignore
import spock.lang.IgnoreRest
import spock.lang.Specification
class OrderSpec extends Specification {
    def "set quantity of an item"() {
         given:
         def order = new Order()
        when: "add only one item"
         order.setOuantitv(5)
         then: "expect value of the item"
         order.getQuantity() == 5
    def "set item name of an item"() {
         given:
         def order = new Order()
        when: "add only one item"
        order.setItemName("apple")
```

```
then: "expect value of the item"
  order.getItemName() == "apple"
}

def "set price of an item"() {
  given:
    def order = new Order()
    when: "add only one item"
    order.setPrice(55)
    then: "expect value of the item"
    order.getPrice() == 55
}
```

ANS2.

EmailService.java

```
Activities 🚇 IntelliJ IDEA Ultimate 🔻
                                                                                                                                                                                  Fri Mar 8, 3:07:35 PM
                                 spock-demo [-/Downloads/Assessments-master/spock-demo] - .../src/main/java/demo/service/EmailService.java [spock-demo.spock-demo.main] - Intellij IDEA
 File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
  spock-demo ⟩ src ⟩ main ⟩ main ≥ main
                                                                                                                                                                                                                                                                                               ■ Project ▼
                                                          ⊕ 😤 💠 — © Order.java × 💆 OrderSpec.groovy × © EmailService.java × 💆 EmailServiceSpec.groovy ×
                    ▼ iava
                                                                                                                          package demo.service;
                                                                                                                                                                                                                                                                                                                                                                                                               Database
                         ▼ 🖿 demo
                                                                                                                          import demo.domain.Order;
                               ▼ 🖿 domain
                                                                                                                         public class EmailService {
                                          © Order
                                ▼ 🖿 service
                                                                                                                                  private static EmailService instance;
                                     © EmailService
                                                                                                                                  public EmailService() {}
                                            OrderService
                                                                                                                                 public static EmailService getInstance() {
   if(instance == null) {
      instance = new EmailService();
   }
}
                                     BasketWeightCalculator
                                     © StackImpl
               ▶ ■ test
                                                                                                                                           return instance;
               gradlew
                                                                                                                                 void sendEmail(Order order) {

    gradlew.bat

               EmailService
        i -
       ≡ : □: 0

✓ Tests passed: 2 of 2 tests – 635 ms

      ** EmailServiceSpec (demo.service) 635 ms

** Send email with order only 623 ms

** send email with order and email str 12 ms

** send email with order and email str 12 ms

** Send email with order and email str 12 ms

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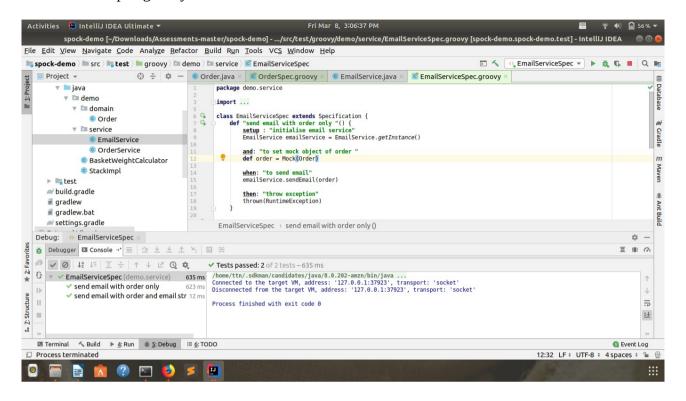
** Send email with order and email str 12 ms

** Send email with order and email str 12 ms

** Send email with order and emai
                                                                                                                      Process finished with exit code 0
                                                                                                                                                                                                                                                                                                                                                                                                       =
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         ☑ Terminal 	Ś Build ▶ 4: Run 	 ★ 5: Debug 	☐ 6: TODO
 Tests passed: 2 (a minute ago)
                                                                                                                                                                                                                                                                                                                                      16:6 LF + UTF-8 + 4 spaces + 🗎 😁
                                =
                                                           ?
                                                                        >_
package demo.service;
import demo.domain.Order;
public class EmailService {
                   private static EmailService instance;
                   public EmailService() {}
                   public static EmailService getInstance() {
                                        if(instance == null) {
                                                            instance = new EmailService();
                                        return instance;
                    void sendEmail(Order order) {
                                        // implementation goes here
                                        throw new RuntimeException();
                   boolean sendEmail(Order order, String cc) {
                                        // implementation goes here
                                        return true;
```

```
}
```

EmailServiceSpec.groovy



```
package demo.service
import demo.domain.Order
import spock.lang.Specification
class EmailServiceSpec extends Specification {
    def "send email with order only "() {
         setup : "initialise email service"
         EmailService emailService = EmailService.getInstance()
         and: "to set mock object of order "
         def order = Mock(Order)
         when: "to send email"
         emailService.sendEmail(order)
         then: "throw exception"
         thrown(RuntimeException)
    def "send email with order and email string "() {
         setup: "initialise email service "
         EmailService emailService = EmailService.getInstance()
         and: "to set mock object of order "
         def order = Mock(Order)
         and: "initialise string"
         String str="emailName"
         when: "to send email"
         Boolean result =emailService.sendEmail(order,str)
         then: "throw exception"
         result
    }
}
```