```
1   $document.ready( function() {
2    ...
3   $( ".merchandise").click(addToCart);
4   $( "#shopCart").click(viewCart);
5   });
6
7   function addToCart() {
8    var coupElem= $("#couponButt");
9    selItem= getItemInfo($(this));
10    for(var i=0; i<availItems.length; i++){
11     if(availItems[i].name == selItem.name)
12      availItems[i].count -= selItem.quantity;
13    }
14    var price= selItem.price * selItem.quantity;
15    if(!coupon.expired){
16     coupElem.removeClass(customer.couponStatus);
17     customer.couponStatus= coupon.Id + '-' + 'used';
18     price -= coupElem.data('value');
19     coupElem.addClass(customer.couponStatus);
20     coupon.expired=true;
21    }
22    customer.payable += price;
23   }
24
25   function viewCart(){
26    ...
27    if($("#couponButt").attr("class") == 'default' && customer.payable==0)
28     showMsg('Shopping cart is empty');
29    else
30     $("div.shopContainer").append("<p>" + "Total purchase is: $" +
       customer.payable +"</p>");
31   }
```

(a)

```
1   @Test
2   public void testCase1(){
3    Select quantity = new Select(driver.findElement(By.
      id("quantityDropDown")));
4    quantity.selectByIndex(1);
5    WebElement item = driver.findElements(By.css("merchandise"));
6    item.click();
7    WebElement cart = driver.findElements(By.id("shopCart"));
8    cart.click();
9    String expectedMsg = "Total purchase is: $70";
10   String msg=driver.findElements(By.cssSelector
      ("div.shopContainer")).getText();
11   assertEquals(msg, expectedMsg);
12  }
```

(b)