1.Problem statement:

Process	Steps To Execute	Expected Results
Add coupon	1. Check for the count of Coupons table record in DB 2. Navigate onto Coupons under Marketing tab 3. Add a new Coupon	Validate the presence of new coupon in DB and the increase in the record count by 1

2. code with comments:

BaseTest.java:

```
package com.ibm.test;


import java.io.FileInputStream;

import java.io.FileNotFoundException;

import java.io.IOException;

import java.lang.*;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.HashMap;

import java.util.Properties;

import java.util.concurrent.TimeUnit;


import org.openqa.selenium.Alert;

import org.openqa.selenium.By;

import org.openqa.selenium.JavascriptExecutor;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;
```

```
import org.openqa.selenium.interactions.Actions;
import org.openqa.selenium.support.ui.Select;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.Assert;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.DataProvider;
import org.testng.annotations.Test;

import com.ibm.pages.UserPage;
import com.ibm.utilities.DBUtil;
import com.ibm.utilities.ExcelReader;
import com.ibm.utilities.ExcelUtil;
import com.ibm.utilities.PropertiesFileHandler;

public class BaseTest extends ExcelReader{
	WebDriverWait wait;
	WebDriver driver;
  @Test()

  public void testcase10() throws InterruptedException, IOException, SQLException{

	FileInputStream file = new FileInputStream("./TestData/data.properties");
	Properties prop = new Properties();
	prop.load(file);
	String url = prop.getProperty("url");
	String username = prop.getProperty("user");
	String password = prop.getProperty("password");
		System.setProperty("webdriver.chrome.driver", "./drivers/chromedriver.exe");
		driver = new ChromeDriver();
```

```
wait = new WebDriverWait(driver, 60);



driver.manage().window().maximize();
driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);
Login login = new Login(driver, wait);
driver.get(url);

login.enterEmailAddress(username);
login.enterPassword(password);
login.clickOnLogin();

WebElement marketingEle=driver.findElement(By.linkText("Marketing"));
marketingEle.click();

WebElement couponsEle=driver.findElement(By.linkText("Coupons"));
couponsEle.click();
int exp= DBUtil.countQuery("SELECT count(name) from as_coupons");
System.out.println("COunt beofre adding coupon"+exp);
Thread.sleep(3000);
WebElement newCouponEle=driver.findElement(By.cssSelector("i.fa.fa-plus"));
newCouponEle.click();

WebElement couponName=driver.findElement(By.name("name"));
couponName.sendKeys("Syeda");

WebElement codeEle=driver.findElement(By.name("code"));
codeEle.sendKeys("123");
```

```
                WebElement discountEle=driver.findElement(By.name("discount"));
                discountEle.sendKeys("5");

                Thread.sleep(3000);

                WebElement saveEle=driver.findElement(By.cssSelector("i.fa.fa-save"));
                saveEle.click();
                Thread.sleep(3000);

                int act=DBUtil.countQuery("SELECT count(name) from as_coupons");
                System.out.println("COunt after adding coupon"+act);

                Assert.assertEquals(act,exp+1);

                Thread.sleep(3000);
    }

}
```

Login.java:

```
package com.ibm.test;

import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.HashMap;
import java.util.Properties;
import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;
```

```
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.WebDriverWait;
import org.testng.Assert;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.Test;

import com.ibm.pages.AdminPage;
import com.ibm.utilities.PropertiesFileHandler;

public class Login extends BaseTest{

	@FindBy(name="email")
	WebElement emailEle;

	@FindBy(name="pword")
	WebElement passEle;

	@FindBy(xpath="/html/body/div/div/div/div[2]/form/button")
	WebElement loginEle;
	WebDriverWait wait;
	WebDriver driver;

	public Login(WebDriver driver,WebDriverWait wait) {
		PageFactory.initElements(driver, this);
		this.driver=driver;
```

```
		this.wait=wait;
	}

	public void enterEmailAddress(String user)
	{
		emailEle.sendKeys(user);
	}
	public void enterPassword(String password)
	{
		passEle.sendKeys(password);
	}
	public void clickOnLogin()
	{
		loginEle.click();
	}

}
```

UserPage.java:

```
package com.ibm.pages;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
import org.openqa.selenium.support.ui.WebDriverWait;

import com.ibm.test.BaseTest;

public class UserPage extends BaseTest{
```

```
@FindBy(xpath="//*[@id=\"pnum2\"]")
WebElement userEle;

@FindBy(id="pword2")
WebElement passEle;

@FindBy(id="mem_login")
WebElement loginEle;
WebDriverWait wait;
WebDriver driver;

public UserPage(WebDriver driver,WebDriverWait wait) {
	PageFactory.initElements(driver, this);
	this.driver=driver;
	this.wait=wait;
}

public void userName(String user1)
{
	userEle.sendKeys(user1);
}
public void enterPassword(String password1)
{
	passEle.sendKeys(password1);
}
public void clickOnLogin()
{
	loginEle.click();
```

```
		}


	/*	@FindBy(xpath="//*cvdcg")

		WebElement tabNotPresentEle;


		public boolean getTabNotPresent()

		{

		boolean deletedTab=tabNotPresentEle.isDisplayed();

		return deletedTab;

		}*/


}
```

DBUtil.java:

```
package com.ibm.utilities;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.ArrayList;
import java.util.List;

public class DBUtil {
	public static String singleDataQuery(String query) throws SQLException {
		Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atoz
groceries","foodsonfinger_atoz","welcome@123");
		Statement s=c.createStatement();
		String text=null;
		//SELECT name from as_category where name="Fruits" - if data exists
value else null.
		//SELECT tab_id,name FROM as_tabs ORDER BY tab_id DESC
		//SELECT * from as_coupons
		ResultSet rs=s.executeQuery(query);
		while(rs.next()) {
			text=rs.getString(1);//validating name alone
			//System.out.println("database check for added
element:"+rs.getString("name"));
		}
		return text;
		//Assert.assertEquals("Grains", rs.getString("name"));
	}
```

```
	public static int countQuery(String query) throws SQLException {
		int count=0;
		Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atoz
groceries","foodsonfinger_atoz","welcome@123");
		Statement s=c.createStatement();
		//select count(name) from as_coupons
		ResultSet rs=s.executeQuery(query);
		while(rs.next()) {
			count=rs.getInt(1);
		}
		return count;

		//Assert.assertEquals("Grains", rs.getString("name"));
	}
	/*
	public ArrayList<ArrayList<Object>> tableDataQuery(String query) throws
SQLException{
		Connection
c=DriverManager.getConnection("jdbc:mysql://foodsonfinger.com:3306/foodsonfinger_atoz
groceries","foodsonfinger_atoz","welcome@123");
		Statement s=c.createStatement();
		ArrayList<ArrayList<Object>> data=new ArrayList<ArrayList<Object>>();
		String[] queries=query.split(",");
		ResultSet rs=s.executeQuery(query);
		ArrayList<Object> temp = null;
		while(rs.next()) {
			//data.add(rs.getString(1), rs.getString(2), rs.getString(3));
			for(int i=0;i<queries.length;i++)
			{
			temp.add(rs.getObject(i));
			}
			data.add(temp);
			temp.clear();
		}
		return data;
		//Assert.assertEquals("Grains", rs.getString("name"));
	}
*/
}
```

Data.properties file:

```
url=https://atozgroceries.com/admin
user=demo@atozgroceries.com
password=456789
url1=https://atozgroceries.com
user1=7675058941
password1=456789
```

3. Explanation of the code:

Created DBUtil.java program for the assertion logic of count of the coupons. In BaseTest.java the coupon is added and used the login details from Login page program and data.propertiesl file. Later the updated count is printed and assertion is done using assertequals() logic.

4. Result flow in detail:

Created DBUtil.java program for the assertion logic of count of the coupons. In BaseTest.java the coupon is added and used the login details from Login page program and data.propertiesl file. Later the updated count is printed and assertion is done using assertequals() logic.

5. Output screenshot: