

Prac 1:

```
<html>
```

```
<head>
```

```
<title>prac1</title>
```

```
<script>
```

```
function calculate(operation) {
```

```
    var num1 = parseInt(document.arithmetic.n1.value);
```

```
    var num2 = parseInt(document.arithmetic.n2.value);
```

```
    var result;
```

```
    switch (operation) {
```

```
        case 'add': result = num1 + num2; break;
```

```
        case 'sub': result = num1 - num2; break;
```

```
        case 'mul': result = num1 * num2; break;
```

```
        case 'div': result = num1 / num2; break;
```

```
    }
```

```
    document.arithmetic.res.value = result;
```

```
}
```

```
</script>
```

```
</head>
```

```
<body>
```

```
<h1 align="center"> Arithmetic Operations </h1>
```

```
<form name="arithmetic">
```

```
    <table border="1" align="center">
```

```
        <tr>
```

```
            <td>Number 1: </td>
```

```
            <td><input type="text" name="n1" size="20"></td>
```

```
        </tr>
```

```
        <tr>
```

```

        <td>Number 2: </td>
        <td><input type="text" name="n2" size="20"></td>
    </tr>
    <tr>
        <td colspan="2">
            <input type="button" value="Add" onclick="calculate('add')">
            <input type="button" value="Subtract" onclick="calculate('sub')">
            <input type="button" value="Multiply" onclick="calculate('mul')">
            <input type="button" value="Divide" onclick="calculate('div')">
        </td>
    </tr>
    <tr>
        <td colspan="2">Result is: <input type="text" name="res" size="20"></td>
    </tr>
</table>
</form>
</body>
</html>

```

Prac 3:

Html:

```

<html>
<head>
<script type="text/javascript"> function gcd()
{
var x,y;
x=parseInt(document.myform.n1.value);
y=parseInt(document.myform.n2.value);
while(x!=y)
{

```

```

    if(x>y){x=x-y;}
    else{y=y-x;}
}

document.myform.result.value=x;
}

</script>
</head>
<body>
<center>
<h1>---Program to calculate GCD of two numbers---</h1>
<hr color="red">
<form name="myform">
    Enter Number 1: <input type="text" name="n1" value=""> <br> <br>
    Enter Number 2: <input type="text" name="n2" value=""> <br> <br>
    <input type="button" name="btn" value="Get GCD" onClick="gcd()"><br><br>
    GCD: <input type="text" name="result" value="">
</form>
</center>
</body>
</html>

```

```

package gcdpackage;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.firefox.FirefoxDriver;
import org.openqa.selenium.firefox.FirefoxOptions;
import org.openqa.selenium.firefox.FirefoxProfile;

public class Test {

```

```

static String driverPath = "C:\\Users\\Usman\\503\\geckodriver.exe";

public static void main(String[] args) {
    System.setProperty("webdriver.gecko.driver", driverPath);

    FirefoxProfile fp = new FirefoxProfile();
    fp.setPreference(FirefoxProfile.PORT_PREFERENCE, "7055");
    FirefoxOptions options = new FirefoxOptions();
    options.setProfile(fp);

    WebDriver driver = new FirefoxDriver(options);

    driver.get("file:///D:/Usman/College/503%20pracs/gcdhtml.html");
    driver.manage().window().maximize();
    driver.findElement(By.name("n1")).sendKeys("36");
    driver.findElement(By.name("n2")).sendKeys("6");
    driver.findElement(By.name("btn")).click();

    String result = driver.findElement(By.name("result")).getAttribute("name=result");
    System.out.println("GCD=" + result);
}
}

```

Prac 4:

```

package excelwrite;

import jxl.*;
import jxl.write.*;
import jxl.write.Number;
import java.io.*;

```

```

import java.util.Locale;

public class Excelwriter {

    public static void main(String[] args) throws IOException, WriteException {

        int r = 0, c = 0;

        String header[] = {"Student Name", "Subject1", "Subject2", "Subject3", "Total"};

        String sname[] = {"Carls", "James", "Paul", "Philip", "Smith", "Thomson", "Rhodey", "Stark", "Gary",
"AnneMarie"};

        int marks[] = {50, 45, 60, 55, 70, 45, 67, 78, 89, 90, 30};

        File file = new File("student.xls");

        WorkbookSettings wbSettings = new WorkbookSettings();

        wbSettings.setLocale(new Locale("en", "EN"));

        WritableWorkbook workbook = Workbook.createWorkbook(file, wbSettings);

        workbook.createSheet("Report", 0);

        WritableSheet excelSheet = workbook.getSheet(0);

        // creating header row
        for (c = 0; c < header.length; c++) {
            Label l = new Label(c, r, header[c]);
            excelSheet.addCell(l);
        }

        // filling names in column 1
        for (r = 1; r <= sname.length; r++) {
            Label l = new Label(0, r, sname[r - 1]);
            excelSheet.addCell(l);
        }

        // filling marks in columns 2, 3, and 4

```

```

    for (r = 1; r <= sname.length; r++) {
        for (c = 1; c < 4; c++) {
            Number num = new Number(c, r, marks[r - 1]);
            excelSheet.addCell(num);
        }
    }

    // filling total in column 5
    for (r = 1; r <= sname.length; r++) {
        int total = marks[r - 1] * 3;
        Number num = new Number(4, r, total);
        excelSheet.addCell(num);
    }

    workbook.write();
    workbook.close();

    System.out.println("Excel File Created!!!!");
}
}

```

Prac 5:

```

package excelread;

import java.io.File;
import java.io.IOException;
import jxl.Cell;
import jxl.CellType;
import jxl.Sheet;
import jxl.Workbook;

```

```

import jxl.read.biff.BiffException;

public class Excelreader {
    private String inputFile;

    public void setInputFile(String inputFile) {
        this.inputFile = inputFile;
    }

    public void read() throws IOException {
        File inputWorkbook = new File(inputFile);
        Workbook w;
        boolean flag = false;
        int count = 0;

        try {
            w = Workbook.getWorkbook(inputWorkbook);
            Sheet sheet = w.getSheet(0);
            for (int j = 0; j < sheet.getRows(); j++) {
                for (int i = 0; i < sheet.getColumns() - 1; i++) {
                    Cell cell = sheet.getCell(i, j);
                    if (cell.getType() == CellType.NUMBER) {
                        if (Integer.parseInt(cell.getContents()) >= 60) {
                            flag = true;
                            if (flag) {
                                count++;
                                flag = false;
                            }
                            break;
                        }
                    }
                }
            }
        }
    }
}

```

```

        }
    }
}

System.out.println("Total number of students who scored more than 60 in one or more subjects: " +
count);
    } catch (BiffException e) {
        e.printStackTrace();
    }
}

public static void main(String[] args) throws IOException {
    Excelreader test = new Excelreader();
    test.setInputFile("C:\\Users\\Usman\\eclipseworkspace\\p5\\student.xls");
    test.read();
}
}

```

Prac 6:

```

package p6;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.firefox.FirefoxDriver;

public class FindAllLinks {
    static String driverPath = "C:\\Users\\Usman\\503\\geckodriver.exe";

    public static void main(String[] args) {
        System.setProperty("webdriver.gecko.driver", driverPath);
    }
}

```



```

WebDriver driver = new FirefoxDriver();
String appUrl = "https://www.google.co.in/";

driver.get(appUrl);

java.util.List<WebElement> links = driver.findElements(By.tagName("a"));

for (int i = 1; i < links.size(); i = i + 1) {
    System.out.println(links.get(i).getText());
}

System.out.println("Total No. of Links: " + links.size());
}
}

```

Prac 7:

Html:

```

<select id="continents">
    <option value="Asia">Asia</option>
    <option value="Europe">Europe</option>
    <option value="Africa">Africa</option>
</select>

```

```

package p7;
import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.firefox.FirefoxDriver;

```

```

import org.openqa.selenium.support.ui.Select;

public class ComboBox {
    static String driverPath = "C:\\Users\\Usman\\503\\geckodriver.exe";

    public static void main(String[] args) {
        System.setProperty("webdriver.gecko.driver", driverPath);

        WebDriver driver = new FirefoxDriver();
        String appUrl = "https://www.toolsqa.com/automation-practice-form/";

        driver.get(appUrl);

        Select oSelect = new Select(driver.findElement(By.id("continents")));

        List<WebElement> oSize = oSelect.getOptions();
        int iListSize = oSize.size();

        for (int i = 0; i < iListSize; i++) {
            String sValue = oSelect.getOptions().get(i).getText();
            System.out.println(sValue);
        }

        System.out.println("Total No. Items in Dropdown: " + iListSize);
    }
}

```

Prac 8:

Html:

```
<input type="checkbox" value="A">A<br>
<input type="checkbox" value="B" CHECKED>B<br>
<input type="checkbox" value="C">C<br>
<input type="checkbox" value="D" CHECKED>D<br>
<input type="checkbox" value="E">E<br>
```

```
package p8;

import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.firefox.FirefoxDriver;

public class MultiCheckBox {

    static String driverPath = "C:\\Users\\Usman\\503\\geckodriver.exe";

    public static void main(String[] args) {

        System.setProperty("webdriver.gecko.driver", driverPath);

        WebDriver driver = new FirefoxDriver();

        String appUrl = "https://www.toolsqa.com/automation-practice-form/";

        driver.get(appUrl);

        List<WebElement> checkBoxes = driver.findElements(By.xpath("//input[@type='checkbox']"));

        int checkedCount = 0, uncheckedCount = 0;

        for (int i = 0; i < checkBoxes.size(); i++) {

            System.out.println(i + " checkbox is selected " + checkBoxes.get(i).isSelected());
```

```
        if (checkBoxes.get(i).isSelected()) {  
            checkedCount++;  
        } else {  
            uncheckedCount++;  
        }  
    }  
  
    System.out.println("No. of selected checkbox: " + checkedCount);  
    System.out.println("No. of unselected checkbox: " + uncheckedCount);  
}  
}
```