Do-While :

```
#include<stdio.h>

void main( )

{

int i,n=5,j=0; clrscr();

printf("Enter the Number ");
Scanf("%d", &i);

do

{
 if(i%2==0)

{

printf("%d is a Even Number\n",i) ; i++;

}
else

{
printf("%d is a Odd Number\n",i);
 i++;

}

j++;

}while(i>0 && j<n); getch();

}
```

While :

```
#include<stdio.h> #include <conio.h> void main (){
int i, n=5,j=1; clrscr();
printf("enter a no: "); scanf("%d", &i);
while (i>0 && j<n)
{ if(i%2==0)
{
printf("%d is a even number \n",i); i++;
j++;
}
Else
{
printf("%d is a odd number \n",i); i++;
j++;
}
}
getch();
}
```

If-Else :

```
#include<stdio.h> #include <conio.h> void main()
{
int i,j; clrscr();
printf("Enter the Number: "); scanf("%d", &j);
for(i=1 ;i<=5;i++)
{
if( j%2==0)
{
printf("%d is a Even Number \n",j);
}
else
{

printf("%d is a odd Number \n",j);
}
j++;
}
getch();
}
```

SWITCH CASE :

```
#include<stdio.h>
void main( )
{
int a,b,c,i;
clrscr( );
printf("1.Add/n 2.Sub /n 3.Mul /n 4.Div /n Enter Your choice ");
scanf("%d", &i);
printf("Enter a,b values "); scanf("%d",&a);
scanf("%d", &b);
switch(i)
{
 case 1:
c=a+b;
printf(" The sum of a & b is: %d " ,c);
break;
case 2:
c=a-b;
printf("The Diff of a & b is: %d" ,c);
break;
case 3:
c=a*b;
printf(" The Mul of a & b is: %d ",c);
break;
case 4:
 c=a/b;
printf("The Div of a & b is: %d" ,c);
break;
```

```
default:
printf(" Enter your choice ");
 break;
}
getch();
}
```

FOR CASE :

```
#include<stdio.h>
 #include <conio.h>
 void main( )
{
int i,j;
clrscr( );
printf("Enter the Number: ");
scanf("%d", &j);
for(i=1 ;i<=5;i++)
{
if( j%2==0)
{
printf("%d is a Even Number \n",j);
}
Else
{
printf("%d is a odd Number \n",j);
}
j++;
}
getch( );
}
```

MATRIX MULTIPLICATION :

```
#include<stdio.h>
 #include<stdlib.h>
void main( )
{
int a[10][10],b[10][10],mul[10][10],r1,c1, r2, c2,i,j,k;
system("cls");
printf("Enter the number of rows and columns for 1st Matrix= ");
scanf("%d %d",&r1, &c1);
printf ("Enter the number of rows and columns for 2nd Matrix= ");
 scanf ("%d %d",&r2, &c2);
if(c1==r2)
{
printf ("Enter the %d elements for 1st matrix = \n", (r1*c1));
for(i=0;i<r1;i++)
{
for(j=0;j<c1;j++)
{
scanf("%d",&a[i][j]);
}
}
printf("Enter the %d elements for 2nd matrix = \n", (r2*c2));
for(i=0;i<r2;i++)
{
for(j=0;j<c2;j++)
{
scanf("%d",&b[i][j]);
}
}
printf("Multiplication of two matrixes is = \n"); for(i=0;i<r1;i++)
{
for(j=0;j<c2;j++)
{
mul[i][j]=0; for(k=0;k<c1;k++)
{
mul[i][j]+=a[i][k]*b[k][j];
}
}
```

```
}

for(i=0;i<r1;i++)
{
for(j=0;j<c2;j++)
{
printf("%d\t",mul[i][j]);
}
printf("\n");
}
}

else
 {
printf("Matrix Multiplication is Not possible...");
}
 getch();
}
```

6.FIREFOX BROWSER INVOKING :

```
import java.time.Duration;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.firefox.FirefoxDriver;
public class Invoke_FF_Browser {

public static void main(String[] args) {

System.setProperty("webdriver.gecko.driver","D:\\Selenium\\geckodri
ver.exe");

WebDriver driver= new FirefoxDriver();
driver.get("http://www.google.co.in");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
String title=driver.getTitle();

if(title.equals("Google"))

{

System.out.println("Pass:Title is Google");

}

else

{

System.out.println("Fail: Title is not Google: actual title

is: "+title);

}

String url=driver.getCurrentUrl(); if(url.contains("google.co.in"))

{

System.out.println("Pass: url has co.in");

}

else
{
```

```
            System.out.println("Fail:url dont have co.in -- Current URL
is: "+url);
            }
            driver.quit();
            }
            }
```

8.b.INTERNET EXPLORER LAUNCH :

```
    import java.time.Duration;
    import org.openqa.selenium.WebDriver;
     import org.openqa.selenium.ie.InternetExplorerDriver;

public class Invoke_IE
 {
public static void main(String[ ] args)
{

System.setProperty("webdriver.ie.driver",
"D:\\Selenium\\IEDriverServer.exe");

WebDriver driver = new InternetExplorerDriver();
driver.manage().window().maximize(); driver.get("http://www.google.co.in");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
driver.close( );
}
}
```

7.Chrome Browser :

```
import java.time.Duration;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.chrome.ChromeOptions;

public class Invoke_Chrome

{

public static void main(String[] args)

 {

System.setProperty("webdriver.chrome.driver",
"D:\\Selenium\\chromedriver.exe");


ChromeOptions options = new ChromeOptions();
options.addArguments("--remote-allow-origins=*");

WebDriver driver = new ChromeDriver(options);

driver.manage().window().maximize();
driver.get("http://www.google.co.in");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
driver.quit();

}


}
```

8a. EDGE Browser :

```
import java.time.Duration;

importorg.openqa.selenium.WebDriver
;

importorg.openqa.selenium.edge.Edge
Driver;

import

org.openqa.selenium.edge.EdgeOptions;

public class Invoke_MsEdge {

public static void main(String[] args) {

System.setProperty("webdriver.edge.driver",
"D:\\Selenium\\msedgedriver.exe");

EdgeOptions options = new EdgeOptions();
options.addArguments("--remote-allow-origins=*");

WebDriver driver = new EdgeDriver(options);
driver.manage().window().maximize();

driver.get("http://www.google.co.in");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

driver.quit();
        }
    }
```

8b.INTERNET EXPLORER :

```
import java.time.Duration;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.ie.InternetExplorerDriver;

public class Invoke_IE

{

public static void main(String[ ] args)

{

System.setProperty("webdriver.ie.driver",

                    "D:\\Selenium\\IEDriverServer.exe");

WebDriver driver = new InternetExplorerDriver();
driver.manage().window().maximize();
driver.get("http://www.google.co.in");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));
driver.close();

}

}
```

9. Verifying Login Functionality :

```
import java.time.Duration;

 import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.firefox.FirefoxDriver;

public class Login_Application {


    public static void main(String[] args) {


        System.setProperty("webdriver.gecko.driver",
"D:\\Selenium\\geckodriver.exe");

        WebDriver driver = new FirefoxDriver();


        driver.get("https://demo.guru99.com/test/newtours/");
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(20));
        String title = driver.getTitle();

        System.out.println("Loaded Website : " + title);
        driver.findElement(By.name("userName")).sendKeys("user");
        driver.findElement(By.name("password")).sendKeys("user");
        driver.findElement(By.name("submit")).click();
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(20));
        String pagetext = driver.getPageSource();

        // System.out.println(pagetext);

        if (pagetext.contains("Login Successfully")) {

            System.out.println("Pass:  Login Successful");

        } else {

            System.out.println("Fail:  Login UnSuccessful");

        }

        driver.quit();

    }

}
```

11.a. Add a cookie:

```
import java.time.Duration;

import org.openqa.selenium.Cookie;
import org.openqa.selenium.WebDriver;

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


public class Add_Cookie {


public static void main(String[] args) {


    System.setProperty("webdriver.chrome.driver",
"D:\\Selenium\\chromedriver.exe");


    ChromeOptions options = new ChromeOptions();
    options.addArguments("--remote-allow-origins=*");
    WebDriver driver = new ChromeDriver(options);


            try {

                driver.get("http://www.google.com");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));


                // Adds the cookie into current browser context
                driver.manage().addCookie(new Cookie("key", "value"));

            } finally {

                driver.quit();

            }

        }

}
```

11.b. Get Named Cookie:

```
package cookie;


import java.time.Duration;

import org.openqa.selenium.Cookie;
import org.openqa.selenium.WebDriver;

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


public class Get_Named_Cookie {


    public static void main(String[] args) {


        System.setProperty("webdriver.chrome.driver",
"D:\\Selenium\\chromedriver.exe");


        ChromeOptions options = new ChromeOptions();
        options.addArguments("--remote-allow-origins=*");
        WebDriver driver = new ChromeDriver(options);


        try {

            driver.get("http://www.google.com");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));


            driver.manage().addCookie(new Cookie("Test", "Value of
Cookie"));

            // Get cookie details with named cookie 'Test'

            Cookie cookie1 = driver.manage().getCookieNamed("Test");
            System.out.println(cookie1);

           } finally {


           driver.quit ( );

           }

           }
```

11.c. Get all cookies:

```
import java.time.Duration;
import java.util.Set;

import org.openqa.selenium.Cookie;
import org.openqa.selenium.WebDriver;

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


public class Get_All_Cookies {


    public static void main(String[] args) {


        System.setProperty("webdriver.chrome.driver",
"D:\\Selenium\\chromedriver.exe");


        ChromeOptions options = new ChromeOptions();
        options.addArguments("--remote-allow-origins=*");
        WebDriver driver = new ChromeDriver(options);

        try {


            driver.get("https://www.facebook.com");


      driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

            // Add few cookies

            driver.manage().addCookie(new Cookie("test1", "cookie1"));
            driver.manage().addCookie(new Cookie("test2", "cookie2"));


            // Get All available cookies

            Set<Cookie> cookies = driver.manage().getCookies();
            System.out.println("Size of Cookies: " + cookies.size());
            System.out.println(cookies);

        } finally {

            driver.quit();

        }

    }


}
```

10. CLOSING WINDOWS WITHOUT USING QUIT METHOD :

```
import java.time.Duration;
import java.util.Set;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WindowType;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.chrome.ChromeOptions;


public class CloseBrowsers {

    public static void main(String[] args) {

System.setProperty("webdriver.chrome.driver","D:\\Selenium\\chromedriver.exe");

        ChromeOptions options = new ChromeOptions();
        options.addArguments("--remote-allow-origins=*");
        WebDriver driver = new ChromeDriver(options);


        driver.get("http://www.google.co.in/");
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));


        driver.switchTo().newWindow(WindowType.TAB);
        driver.navigate().to("https://www.facebook.com/");
        driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));


        Set<String> allWH = driver.getWindowHandles();int
        count = allWH.size(); System.out.println(count);


        for (String wh : allWH) {
            driver.switchTo().window(wh); String
            title = driver.getTitle();
            System.out.println(title); driver.close();


                try {
                        Thread.sleep(5000);
                    } catch (Exception e) {
                    System.out.println(e);
                }
```

```
            }
        }

    }
```

12. Facebook Account Creation page Verification :

```
public static void main(String[] args) throws InterruptedException {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver","C://Swapna//chromedriver.exe");

ChromeDriver driver = new ChromeDriver();

driver.get("https://www.facebook.com/");

Thread.sleep(2000);


WebElement username = driver.findElement(By.id("email"));

username.sendKeys("ram72004@gmail.com");

WebElement password = driver.findElement(By.id("pass"));

password.sendKeys("ram1730");

WebElement Login = driver.findElement(By.name("login"));

Login.click();

Thread.sleep(2000);

driver.switchTo().alert().dismiss();

//driver.manage().timeouts().implicitlyWait(30, TimeUnit.SECONDS);

WebElement navigationclick =
driver.findElement(By.xpath("//*[@id=\"mount_0_0_rU\"]/div/div[1]/div/div[2]/div[5]/div[1
]/span/div/div[1]/div/svg/g/image"));

WebElement logout =
driver.findElement(By.xpath("//*[@id=\"mount_0_0_rU\"]/div/div[1]/div/div[2]/div[5]/div[2
]/div/div[2]/div[1]/div[1]/div/div/div/div/div/div/div/div[1]/div/div/div[1]/div[2]/div/div[
5]/div/div[1]/div[2]/div/div/div/div/span"));

navigationclick.click();

if(logout.isEnabled() && logout.isDisplayed()) {

logout.click();

}

else {
```

```
System.out.println("Element not found");
}
}
```

13. Gmail login & Logout Procedure :

```
package gmail;

import org.openqa.selenium.By;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

public class gmail1 {

public static void main(String[] args) throws InterruptedException {

try {

// TODO Auto-generated method stub

System.setProperty("webdriver.chrome.driver","C://Swapna//chromedriver.exe");

ChromeDriver driver = new ChromeDriver();

driver.get("https://www.gmail.com");

String mail="joels172004@gmail.com";

WebElement emailInput = driver.findElement(By.id("identifierId")); // textfield

emailInput.clear();

emailInput.sendKeys(mail);

WebElement nextButton = driver.findElement(By.id("identifierNext")); // next button

nextButton.click();

Thread.sleep(8000);

WebElement passwordInput = driver.findElement(By.name("Passwd")); //password field

passwordInput.sendKeys("joel1730");

WebElement passwordNextButton = driver.findElement(By.id("passwordNext")); //next
button

passwordNextButton.click();

System.out.println("Clicked! Logged in !");

Thread.sleep(5000);
```

```
WebElement profilePicture = driver.findElement(By.cssSelector("#gb > div.gb_od.gb_id.gb_ud > div.gb_yd.gb_cb.gb_nd.gb_Ad > div.gb_Sd > div.gb_b.gb_v.gb_Zf.gb_H > div > a")); // account logout button

profilePicture.click();

Thread.sleep(10000);

driver.switchTo().frame("account");

System.out.println("Found Frame!");

Thread.sleep(1000);

WebElement signoutbtn= driver.findElement(By.xpath("//div[contains(text(),'Sign out')]"));

signoutbtn.click();

Thread.sleep(5000);

System.out.println("Clicked! Signed out !");

driver.quit();

}

catch(Exception e) {

System.out.println("Found some Error!");

}

}

}
```