Experiment 2:

Obj: Find the Coverage & Test Cases of the following program using JaButi Tool:

2.1: Write a program that takes three double numbers from the java console representing, respectively, the three coefficients a,b, and c of a quadratic equation.

2.2: Write a program that reads commercial website URL from a url from file .you should expect that the URL starts with www and ends with .com. retrieve the name of the site and output it. For instance, if the user inputs www.yahoo.com, you should output yahoo. After that find the test cases and coverage using JaButi.

2.1: Write a program that takes three double numbers from the java console representing, respectively, the three coefficients a,b, and c of a quadratic equation.

Code:

```
package mypackage;

import java.util.Scanner;
public class QuadraticEquationExample1
{
public static void main(String[] Strings)
{
Scanner input = new Scanner(System.in);
System.out.print("Enter the value of a: ");
double a = input.nextDouble();
System.out.print("Enter the value of b: ");
double b = input.nextDouble();
System.out.print("Enter the value of c: ");
double c = input.nextDouble();
double d= b * b - 4.0 * a * c;
if (d> 0.0)
{
double r1 = (-b + Math.pow(d, 0.5)) / (2.0 * a);
double r2 = (-b - Math.pow(d, 0.5)) / (2.0 * a);
System.out.println("The roots are " + r1 + " and " + r2);
```

```java
}
else if (d == 0.0)
{
double r1 = -b / (2.0 * a);
System.out.println("The root is " + r1);
}
else
{
System.out.println("Roots are not real.");
}
}
}
```

Output:

2.2: Write a program that reads commercial website URL from a url from file .you should expect that the URL starts with www and ends with .com. retrieve the name of the site and output it. For instance, if the user inputs www.yahoo.com, you should output yahoo. After that find the test cases and coverage using JaButi.

Code:

```java
package urlpackage;

import java.util.Scanner;

public class UrlClass {

        public static void main(String args[]){

                String first= "www.";
                String last = ".com";
                Scanner sc = new Scanner(System.in);
```

```java
        System.out.println("Enter any url (the URL starts with www. and ends with
.com)");

            String url_name= sc.nextLine();
            System.out.println("Yoy entered following url: \n " + url_name);

            int url_length = url_name.length();

            String s1 = url_name.substring(0, 4);

            String s2= url_name.substring(url_length-4);
            String s3= url_name.substring(4, url_length-4);
            //System.out.println("S1= " + s1);
            //System.out.println("S2=" + s2);
            //System.out.println("S3=" + s3);




            if (s1.equalsIgnoreCase(first)  && s2.equalsIgnoreCase(last)){
                System.out.println("The Site Name is := " + s3);

            }
            else{
                System.out.println("You entered wrong url (The URL must starts with
www. and ends with .com");
            }


        }
}
```

Output: