CSA37 Lab Manual

Test case Written (Marks)	Junit code (Marks)	Selenium code (Marks)	GitHub (Marks)	Viva (Marks)
40	20	20	10	10

Junit(10 Questions with Answers)

1. **Write a white box testing code (junit) to reverse a word and using assert statement for Proof the value**

```
import static org.junit.Assert.assertEquals;
import java.util.Scanner;
class saveethaTest
{
	public static void main(String[] args)
{
	String str;
	char ch;
	Scanner sc=new Scanner(System.in);
	System.out.print("Enter a string : ");
	str=sc.nextLine();
	System.out.println("Reverse of a String "'+str+'" is :");
	for(int j=str.length();j>0;--j)
	{
		System.out.print(str.charAt(j-1));
	assertEquals("sse",str);
			}
		assertEquals("sse",str);

}
}
```

2. **Write a white box testing code (junit) to String comparison of word and using assert statement for Proof the value**

```
import static org.junit.Assert.assertEquals;
import java.util.Scanner;
public class third {
public static void main(String [] args)
{
```

```
        Scanner in=new Scanner(System.in);
                System.out.println("enter the user name");
        String str1=in.nextLine();
        System.out.println("Reenter the user name");
        String str2=in.nextLine();
        assertEquals(str1,str2);
                }
}
```

3. Write a junit code for voting system and uses assert statement and verify the white box testing?

```
import static org.junit.Assert.assertTrue;
import java.util.Scanner;
 class four
{
public static void main(String[] args)
{
int age,shrt;
Scanner scan = new Scanner(System.in);
System.out.println(" Please enter your age");
age = scan.nextInt();
if(age>=18)
{
System.out.println("Welcome to voting system Yo can Vote");
}
else
{
        shrt= (18 - age);
System.out.println("Sorry,You can vote after :"+ shrt + " years");
assertTrue(age==shrt);

} } }
```

4. **Write a program using function to calculate the simple interest. Suppose the customer is a senior citizen. He is being offered 12 percent rate of interest; for all other customers, the ROI is 10 percent. The output values should verify using white box testing?**

```
import static org.junit.Assert.assertTrue;
import java.util.Scanner;
class intrest
{
        public static void main(String[] args)
        {
                Scanner sc=new Scanner(System.in);
                float P=sc.nextFloat();
```

```
        float R=sc.nextFloat();
        float T=sc.nextFloat();
        float SI = (P * T * R) / 100;
        System.out.println("Simple interest = " + SI);
        assertTrue(3600==SI);
        }
}
```

5. Given number is palindrome or not and verify The output values should verify using white box testing?

```
import java.util.Scanner;
import static org.junit.Assert.assertTrue;
public class palindrome
{
    public static void main(String args[])
    {
        Scanner in = new Scanner(System.in);
        int r, sum = 0, temp; int n = in.nextInt();
        temp = n;
        while (n > 0)
        {
            r = n % 10; n = n / 10;
            sum = (sum * 10)+r;
        }
        System.out.println(sum);
        assertTrue(787==sum);
        if(temp==sum)
            System.out.println(sum+" is palindrome number");
        else
            System.out.println(sum+" is not palindrome number");
        }


    }
```

6. Write a program to convert Decimal number equivalent to Binary number and octal numbers? The output values should verify using white box testing?

```
import static org.junit.Assert.assertTrue;

import java.util.Scanner;
class binary

{
    public static void main(String[] args)
    { Scanner in = new Scanner(System.in);
    // decimal number
```

```
int decimal = in.nextInt();
// convert decimal to binary
String binary = Integer.toBinaryString(decimal);

System.out.println("BINARY IS " + binary);
//convert decimal to octal
System.out.print("OCTAL IS ");
System.out.println(Integer.toOctalString(decimal));
//assertEqual("1100" , binary);
assertTrue(14== decimal);

 }

}
```

7. **Write a Java Program to Convert a Given Number of Days in Terms of Years, Weeks & Days. The output values should verify using white box testing?**

```
 import static org.junit.Assert.assertTrue;
import java.util.Scanner;
public class year
{
	public static void main(String args[])
	{
		int m, year, week, day;
		Scanner s = new Scanner(System.in);
		System.out.print("Enter the number of days:");
		m = s.nextInt();
		year = m / 365;
		assertTrue(2==year);
		m = m % 365;
		System.out.println("No. of years:"+year);
		week = m / 7;
		m = m % 7;
		System.out.println("No. of weeks:"+week);
		day = m;
		System.out.println("No. of days:"+day); }
		}
```

8. **Find the factorial of n? The output values should verify using white box testing?**

```
import static org.junit.Assert.assertTrue;
import java.util.Scanner;
class factorial
{
public static void main(String[] args)
```

```
{
int i,j,pr=1;
try{
Scanner s=new Scanner(System.in);
System.out.println("Enter the number to find the factorial");
int n=s.nextInt();
if(n<0)
{
System.out.println("Invalid");
}
else if(n==0)
{
System.out.println("1");
}
else
{
for(i=n;i>0;i--)
{
pr=pr*i;
}
System.out.println("The answer is:"+pr);
assertTrue(120==pr);
}
}
catch(Exception e)
{
System.out.println("Invalid");
}
}
}
```

9. **Find the year of the given date is leap year or not .The output values should verify using white box testing?**

```
import static org.junit.Assert.assertTrue;
 import java.util.Scanner;
class leapyear
{
        public static void main(String[] args)
        {
        int i=0;
        System.out.println("Enter the date/month/year");
        Scanner s=new Scanner(System.in);
```

```
String re=s.next();
String[] r=re.split("/",3);
int x=Integer.parseInt(r[2]);
assertTrue(x==2000);
if(x%4==0)
{
System.out.println("It is an leap year");

}
else{
System.out.println("It is not a leap year:");
}
}
}
```

10. Write a program to find the square, cube of the given decimal number. The output values should verify using white box testing?

```
import static org.junit.Assert.assertTrue;
import java.util.Scanner;
public class CubeSquare{
public static void main(String[] args)
{
try{
Scanner s=new Scanner(System.in);
System.out.println("Enter an number");
double n=s.nextDouble();
double a=0,b=0;
a=n*n;
b=n*n*n;
System.out.println("The square of number="+a);
System.out.println("The square of number="+b);
}
catch(Exception e)
{
System.out.println("Invalid");
}
}
assertTrue(expected output==a);
assertTrue(expected output ==b);
}
```

Sellinium (5 Questions with answers)

1. Write a sellinium program for automation and open a chrome browser with google.com

2 Write a sellinium program for automation and open a Mozila browser with google.com

3. Write a sellinium program to Automate login in ARMS Portal with the help of Chrome browser

4. Write a sellinium program Automate login in IRCTC Portal with the help of Chrome browser

5. Write a sellinium program Automate login in Swiggy Portal with the help of Chrome browser.

Case study 10

1. Take any system (e.g. ATM system) and study its system specifications and report the various bugs.

2. Write the test cases for any known application (e.g. Banking application)

3. Write the test cases for GMAIL

4. Write the test cases for FACEBOOK,TWITTER etc.,

5. Create a test plan document for any application (e.g. Library Management System)

6. Test case for calculator in windows application

7. Write the test cases for ARMS Portal

8. Write the test cases for IRCTC Portal

9. Write the test cases for Swiggy Mobile application

10. Write the test cases for Flipcart Portal

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