ASSIGNMENT-1

DATE:17/07/2024
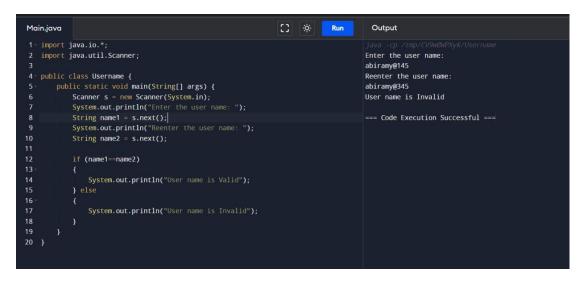**NAME:**ABIRAMY.K.J
COURSE:JAVA PROGRAMMING
CODE:CSA0984

1.Write a program to check the entered user name is valid or not. Get both the inputs from the user.
Sample Input:
Enter the user name: Saveetha@789
Reenter the user name: Saveetha@123
Sample Output:User name is Invalid

```java
import java.io.*;
import java.util.Scanner;

public class Username {
    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter the user name: ");
        String name1 = s.next();
        System.out.println("Reenter the user name: ");
        String name2 = s.next();

        if (name1==name2)
        {
            System.out.println("User name is Valid");
        } else
        {
            System.out.println("User name is Invalid");
        }
    }
}
```

```
java -cp /tmp/CV9wBWPXyK/Username
Enter the user name:
abiramy@145
Reenter the user name:
abiramy@345
User name is Invalid

=== Code Execution Successful ===
```

2.Write a program to find whether the person is eligible for vote or not. And if that particular person is not eligible, then print how many years are left to be eligible.
Sample Input:
Enter your age:7
Sample output:
You are allowed to vote after 11 years

```java
import java.io.*;
import java.util.Scanner;

public class Vote {
    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);
        System.out.print("Enter your age: ");
        int age = s.nextInt();
        int voting_age = 18;
        if (age >= voting_age)
        {
            System.out.println("You are eligible to vote.");
        } else
        {
            int yearsleft = voting_age - age;
            System.out.println("You are allowed to vote after " + yearsleft + " years.");
        }
    }
}
```

```
java -cp /tmp/HVG6e9WSsc/Vote
Enter your age: 15
You are allowed to vote after 3 years.

=== Code Execution Successful ===
```

3.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.
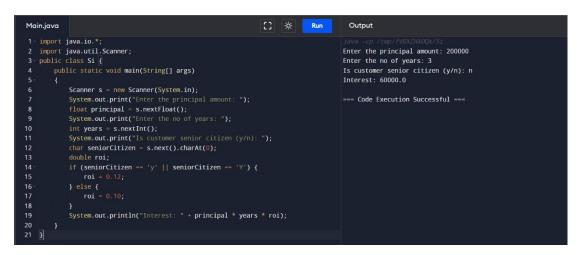**Sample Input:**
Enter the principal amount: 200000
Enter the no of years: 3
Is customer senior citizen (y/n): n
Sample Output:
Interest: 60000

```java
import java.io.*;
import java.util.Scanner;
public class Si {
    public static void main(String[] args)
    {
        Scanner s = new Scanner(System.in);
        System.out.print("Enter the principal amount: ");
        float principal = s.nextFloat();
        System.out.print("Enter the no of years: ");
        int years = s.nextInt();
        System.out.print("Is customer senior citizen (y/n): ");
        char seniorCitizen = s.next().charAt(0);
        double roi;
        if (seniorCitizen == 'y' || seniorCitizen == 'Y') {
            roi = 0.12;
        } else {
            roi = 0.10;
        }
        System.out.println("Interest: " + principal * years * roi);
    }
}
```

Output:
```
java -cp /tmp/fVBXZHXOQx/Si
Enter the principal amount: 200000
Enter the no of years: 3
Is customer senior citizen (y/n): n
Interest: 60000.0

=== Code Execution Successful ===
```

4.Find the year of the given date is leap year or not
Sample Input:
Enter Date: 04/11/1947
Sample Output:
Given year is Non Leap Year

```java
import java.io.*;
import java.util.Scanner;

public class leapyear {
    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);
        System.out.print("Enter Date (MM/dd/yyyy): ");
        String date = s.next();
        String[] parts = date.split("/");
        int year = Integer.parseInt(parts[2]);
        if ((year % 4 == 0 && year % 100 != 0) || year % 400 == 0) {
            System.out.println("Given year is Leap Year");
        } else {
            System.out.println("Given year is Non Leap Year");
        }
    }
}
```

Output:
```
java -cp /tmp/vw2hFzoMB1/leapyear
Enter Date (MM/dd/yyyy): 02/02/2024
Given year is Leap Year

=== Code Execution Successful ===
```

5.Write a program to find the square, cube of the given decimal number
Sample Input:
Given Number: 0.6
Sample Output:
Square Number: 0.36
Cube Number:0.216

```java
import java.io.*;
import java.util.Scanner;

public class square_cube {
    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);

        System.out.print("Enter a decimal number: ");
        double n = s.nextDouble();

        double square = n * n;
        double cube = n * n * n;

        System.out.printf("Square Number: %.2f%n", square);
        System.out.printf("Cube Number: %.3f%n", cube);
    }
}
```

Output
```
java -cp /tmp/S82w83IU8k/square_cube
Enter a decimal number: 0.3
Square Number: 0.09
Cube Number: 0.027

=== Code Execution Successful ===
```