

```
SortAndSearch.java | StreamTester.java | StringExample.java x
1 package dj;
2 public class StringExample {
3
4     public static void main(String[] args) {
5         // 1. Three Different Ways to Declare and Instantiate a String Object "myString" Containing "abc"
6
7         // Method 1: Using String literal
8         String myString1 = "abc";
9
10        // Method 2: Using the new keyword
11        String myString2 = new String("abc");
12
13        // Method 3: Using a character array
14        char[] charArray = {'a', 'b', 'c'};
15        String myString3 = new String(charArray);
16
17        System.out.println("myString1: " + myString1);
18        System.out.println("myString2: " + myString2);
19        System.out.println("myString3: " + myString3);
20
21        // 2. Given the Three String Objects Below, Determine the Return Values for Each Expression
22
23        String s1 = "ABC";
24        String s2 = new String("DEF");
25        String s3 = "AB" + "C";
26
27        // a. s1.compareTo(s2);
28        int compareResult1 = s1.compareTo(s2);
```

```
Console x
terminated> StringExample [Java Application] C:\Users\MAITHREYEE\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-1626\jre\bin\javaw.exe (23 Aug 2024, 12:26:55 pm - 12:26:55 pm) [pid: 25824]
myString1: abc
myString2: abc
myString3: abc
s1.compareTo(s2): -3
s2.equals(s3): false
s3 == s1: true
s2.compareTo(s3): 3
s3.equals(s1): true
Concatenated String: HelloWorld
```

```
1 package dj;
2 import java.util.Scanner;
3
4 public class CalculatorIfElse {
5
6     public static void main(String[] args) {
7         Scanner scanner = new Scanner(System.in);
8
9         // Prompt the user to enter the first number
10        System.out.print("Enter the first number: ");
11        double num1 = scanner.nextDouble();
12
13        // Prompt the user to enter the second number
14        System.out.print("Enter the second number: ");
15        double num2 = scanner.nextDouble();
16
17        // Prompt the user to enter an operator
18        System.out.print("Enter an operator (*, +, /, %, -): ");
19        char operator = scanner.next().charAt(0);
20
21        double result;
22
23        // Using if/else logic to determine the operation
24        if (operator == '*') {
25            result = num1 * num2;
26            System.out.println("Result: " + result);
27        } else if (operator == '+') {
28            result = num1 + num2;
```

<terminated> CalculatorIfElse [Java Application] C:\Users\MAITHREYEE\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_22.0.2.v20240802-1626\jre\bin\javaw.exe (23 Aug 2024, 12:44:15 pm – 12:44:25 pm) [pid: 21312]

```
Enter the first number: 2
Enter the second number: 3
Enter an operator (*, +, /, %, -): *
Result: 6.0
```

SortAndSearch.java StreamTester.java StringExample.java CalculatorIfElse.java WeightOnPlanets.java X

```

1 package dj;
2 import java.util.Scanner;
3
4 public class WeightOnPlanets {
5
6     public static void main(String[] args) {
7         Scanner scanner = new Scanner(System.in);
8
9         // Ask the user for their weight on Earth
10        System.out.print("Enter your weight on Earth (in lbs): ");
11        double earthWeight = scanner.nextDouble();
12
13        // Display the menu of planets
14        System.out.println("\nChoose a planet to calculate your weight on:");
15        System.out.println("1. Mercury");
16        System.out.println("2. Venus");
17        System.out.println("3. Mars");
18        System.out.println("4. Jupiter");
19        System.out.println("5. Saturn");
20        System.out.println("6. Uranus");
21        System.out.println("7. Neptune");
22
23        // Get the user's choice
24        System.out.print("Enter the number corresponding to the planet: ");
25        int choice = scanner.nextInt();
26

```

Console X

```
Enter your weight on Earth (in lbs): 50
```

Choose a planet to calculate your weight on:

1. Mercury
2. Venus
3. Mars
4. Jupiter
5. Saturn
6. Uranus
7. Neptune

```
Enter the number corresponding to the planet: 3
```

Your weight on Mars is 19.0 lbs.



versityAdmission.java - Eclipse IDE

Navigate Search Project Run Window Help

SortAndSearch.java StreamTester.java StringExample.java CalculatorIfElse.java WeightOnPlanets.java MountvilleUniversityAdmission.java

```
1 package dj;
2 import java.util.Scanner;
3
4 public class MountvilleUniversityAdmission {
5
6     public static void main(String[] args) {
7         Scanner scanner = new Scanner(System.in);
8
9         // Get the student's status (valedictorian or salutatorian)
10        System.out.print("Are you the valedictorian or salutatorian of a school of 1400 or more students? (yes/no): ");
11        String valedictorianOrSalutatorian = scanner.next();
12
13        // Get the student's GPA
14        System.out.print("Enter your GPA: ");
15        double gpa = scanner.nextDouble();
16
17        // Get the student's SAT score
18        System.out.print("Enter your SAT score: ");
19        int satScore = scanner.nextInt();
20
21        // Determine if the student is admitted
22        boolean isAdmitted = false;
23
24        if (valdictorianOrSalutatorian.equalsIgnoreCase("yes")) {
25            isAdmitted = true;
26        } else if (gpa >= 4.0 && satScore >= 1100) {
```

Console

```
<terminated> MountvilleUniversityAdmission [Java Application] C:\Users\MAITHREYEE\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-1626\jre\bin\javaw.exe (23 Aug 2024, 12:48:24 pm - 12:48:48 pm)
Are you the valedictorian or salutatorian of a school of 1400 or more students? (yes/no): yes
Enter your GPA: 58
Enter your SAT score: 69
Congratulations! You have been admitted to Mountville University.
```