The Scanner class in Java is a part of the **java.util** package and provides methods to

read input from various sources such as the **console, files, or streams**.

Here is a list of some commonly used methods in the Scanner class:

**Scanner(System.in):** Constructor that creates a Scanner object to read input from the console.

**Scanner(InputStream source):** Constructs a new Scanner that reads from the specified input stream.

**Scanner(String source):** Constructs a new Scanner that reads from the specified string.

**hasNext():** Returns true if the input has another token (word, number, etc.), otherwise false.

**hasNextLine():** Returns true if the input has another line, otherwise false.

**next():** Returns the next token (string) from the input.

**nextLine():** Returns the next line of input as a string.

**nextInt():** Reads the next token as an integer.

**nextLong():** Reads the next token as a long integer.

**nextFloat():** Reads the next token as a float.

**nextDouble():** Reads the next token as a double.

**nextBoolean():** Reads the next token as a boolean value (true or false).

**useDelimiter(String pattern):** Sets the delimiter for the Scanner to the specified pattern. The default delimiter is whitespace.

**skip(String pattern):** Skips the input that matches the specified pattern.

**reset():** Resets the Scanner's delimiter and locale settings to their initial values.

**ioException():** Returns the IOException last thrown by this Scanner's underlying Readable.

**close():** Closes the Scanner object and releases any system resources associated with it.

**useRadix(int x), radix(int x)**

The Scanner radix() method is helpful to determine what is the Scanner object has been

set in scanning numbers. The default radix can be overridden using the useRadix()

method thus if we want to use again the default radix, invoking reset()

method will force this Scanner object to use the default.

**sc.useDelimiter("any pattern"):** The useDelimiter() is a Java Scanner class method which is used to set the delimiting pattern of the Scanner which is in using. There is two different types of Java useDelimiter() method which can be differentiated depending on its parameter. These are:

Java Scanner useDelimiter(Pattern pattern) Method

Java Scanner useDelimiter(String pattern) Method

These are just some of the most commonly used methods of the Scanner class.

The class provides several other methods for handling input in different ways,

but the ones listed above cover the basics of reading input from the console using

the Scanner class.

The **hasNextXXX(), nextXXX(), and findXXX()** methods are available for various data types like int,

double, String, etc., where XXX represents the respective data type.

Remember to import **java.util.Scanner** before using the Scanner class. Also,

make sure to **close** the scanner after its usage to free up resources.

import java.util.Scanner;

public class ScannerExample {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter an integer: ");

int num = scanner.nextInt();

System.out.println("You entered: " + num);

System.out.print("Enter a double: ");

double d = scanner.nextDouble();

System.out.println("You entered: " + d);

System.out.print("Enter a string: ");

String str = scanner.next();

System.out.println("You entered: " + str);

scanner.close();

}

}