

SCANNER

IN THE NAME OF ALLAH

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

THE GRACIOUS, THE MERCIFUL.



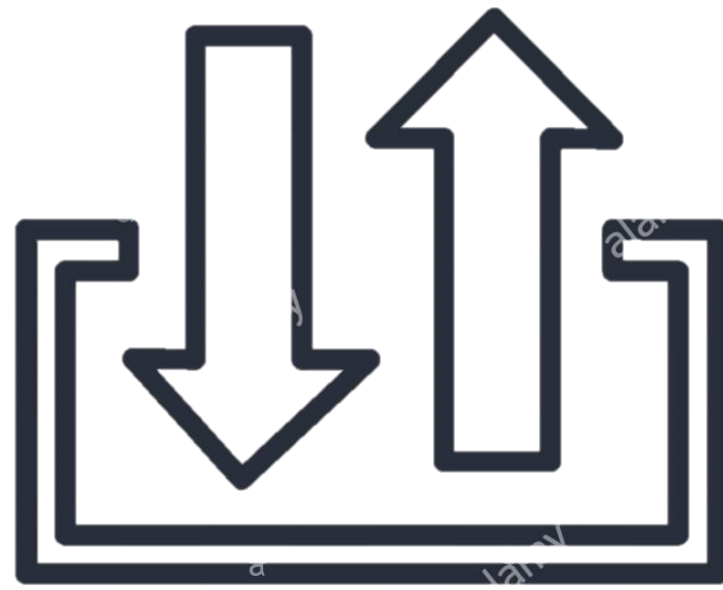
GETS - GETTING EDUCATION WITH TECHNOLOGICAL SYSTEM

Instructor: Sir A.Rehman Ali Brohi

LECTURE: 8

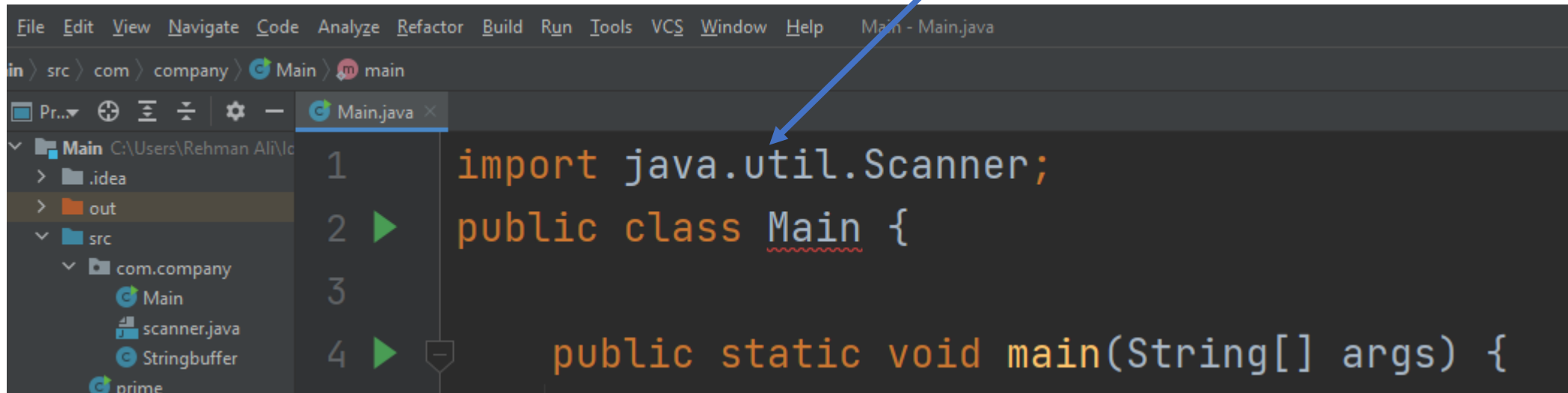
Scanner





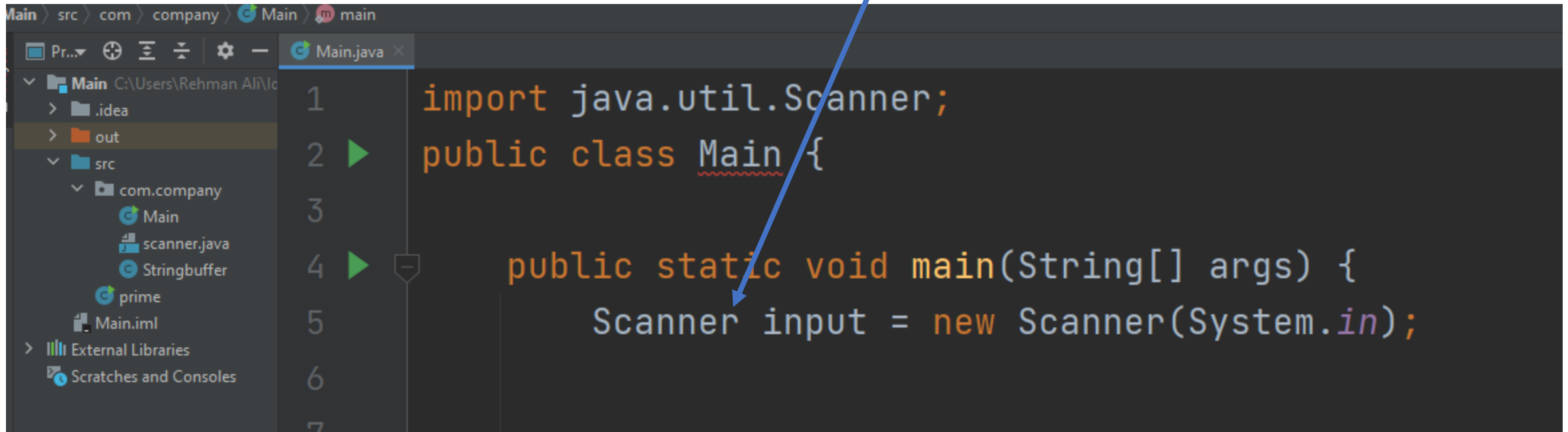
The Java Scanner class is **used to collect user input**. Scanner is part of the `java.util` package, so it can be imported without downloading any external libraries.

First you have to **import java.util.Scanner;** in header
So that we can use their methods



```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help Main - Main.java
in > src > com > company > Main > main
Main.java x
Main C:\Users\Rehman Ali\I...
  .idea
  out
  src
    com.company
      Main
      scanner.java
      StringBuffer
      prime
1 import java.util.Scanner;
2 public class Main {
3
4 public static void main(String[] args) {
```

Second you have to create Scanner object so we can use it for multiple times



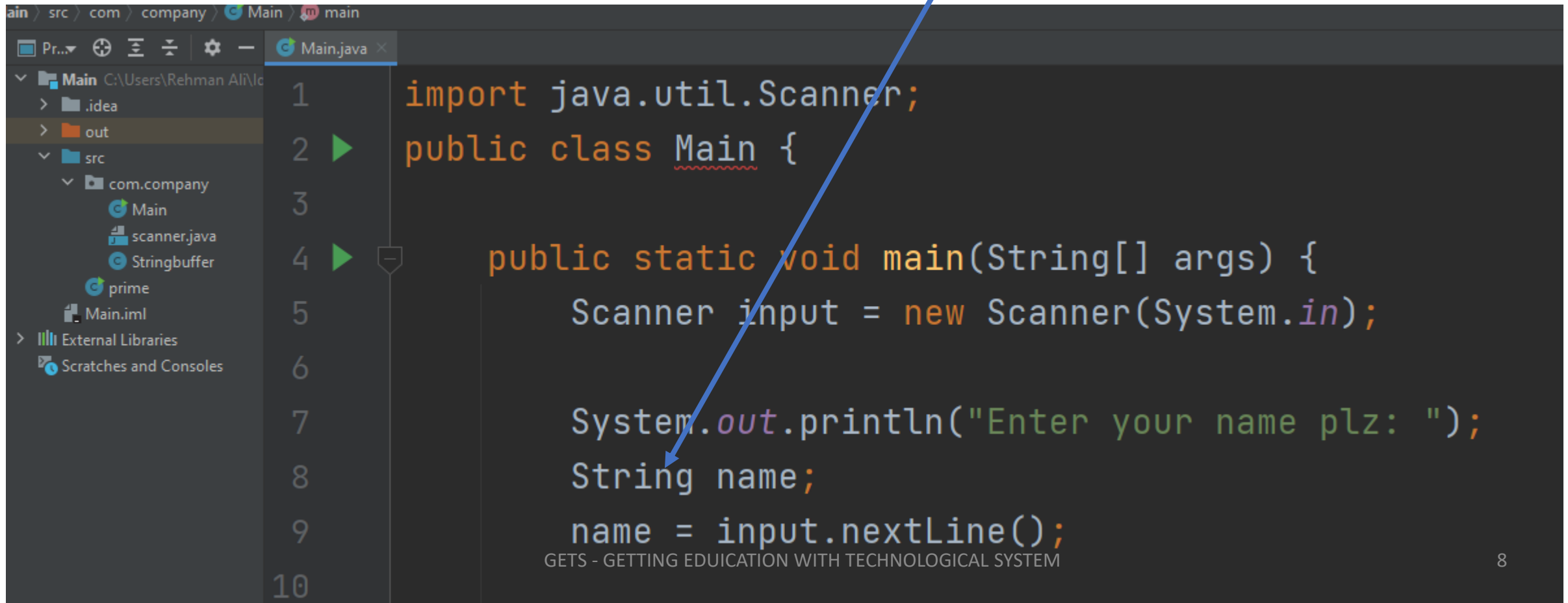
The screenshot shows an IDE window with a project named 'Main'. The file explorer on the left shows the project structure: 'Main' (C:\Users\Rehman Ali\Idea) containing '.idea', 'out', 'src', 'com.company' (containing 'Main', 'scanner.java', 'Stringbuffer', 'prime', 'Main.iml'), 'External Libraries', and 'Scratches and Consoles'. The main editor displays the code for 'Main.java' with line numbers 1 through 7. The code is as follows:

```
1 import java.util.Scanner;
2 public class Main {
3
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6
7     }
```

A blue arrow points from the text 'multiple times' in the first block to the 'Scanner' variable in line 5 of the code.

For getting text input from user we will use string and nextLine method.

***NOTE:** if you use only next method for string data it will only display one word

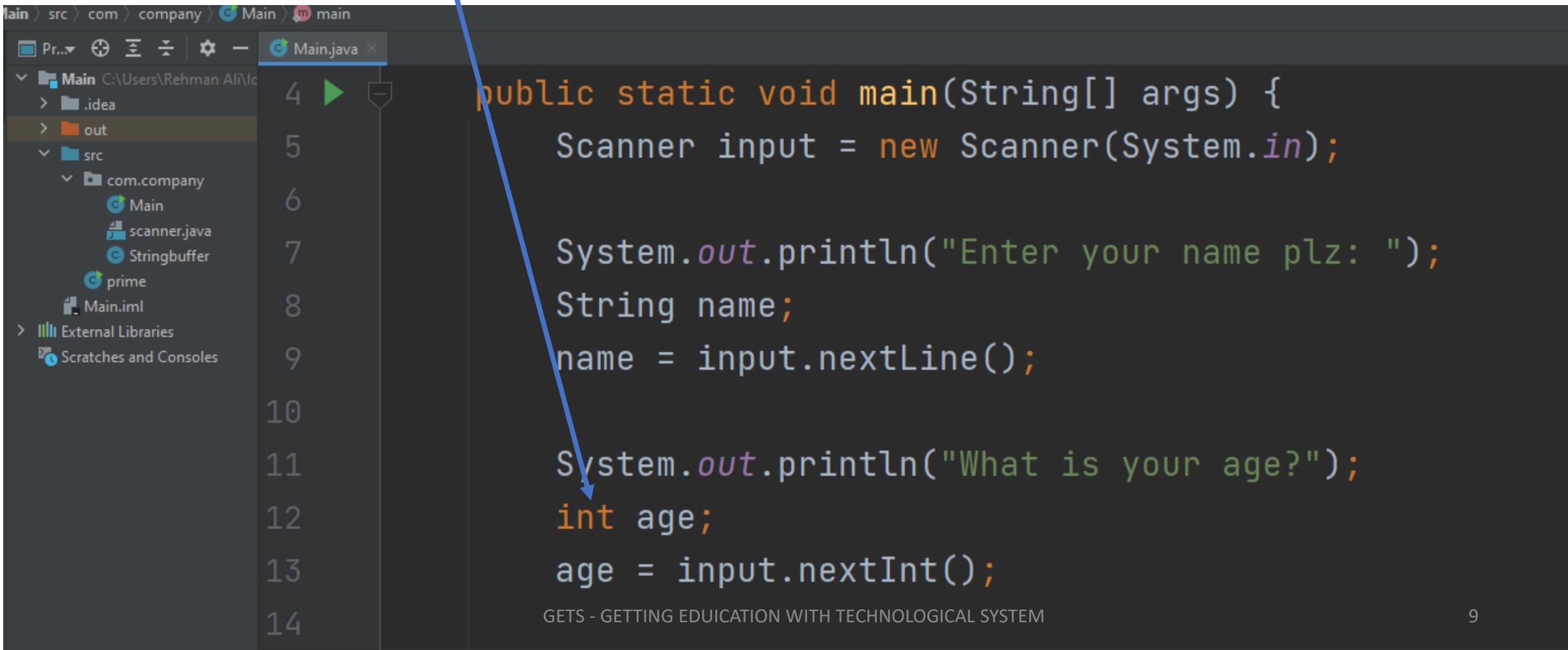


The screenshot shows an IDE window with a project named 'Main'. The file explorer on the left shows the project structure: 'Main' (C:\Users\Rehman Ali\Idea) containing '.idea', 'out', 'src', and 'Main.iml'. The 'src' folder contains 'com.company' which has 'Main', 'scanner.java', and 'Stringbuffer'. The 'Main' class is selected. The code editor shows the following Java code:

```
1 import java.util.Scanner;
2 public class Main {
3
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6
7         System.out.println("Enter your name plz: ");
8         String name;
9         name = input.nextLine();
10    }
```

A blue arrow points from the text 'nextLine method' in the first paragraph to the `nextLine()` method call in the code. The text 'GETS - GETTING EDUCATION WITH TECHNOLOGICAL SYSTEM' is visible at the bottom of the code editor.

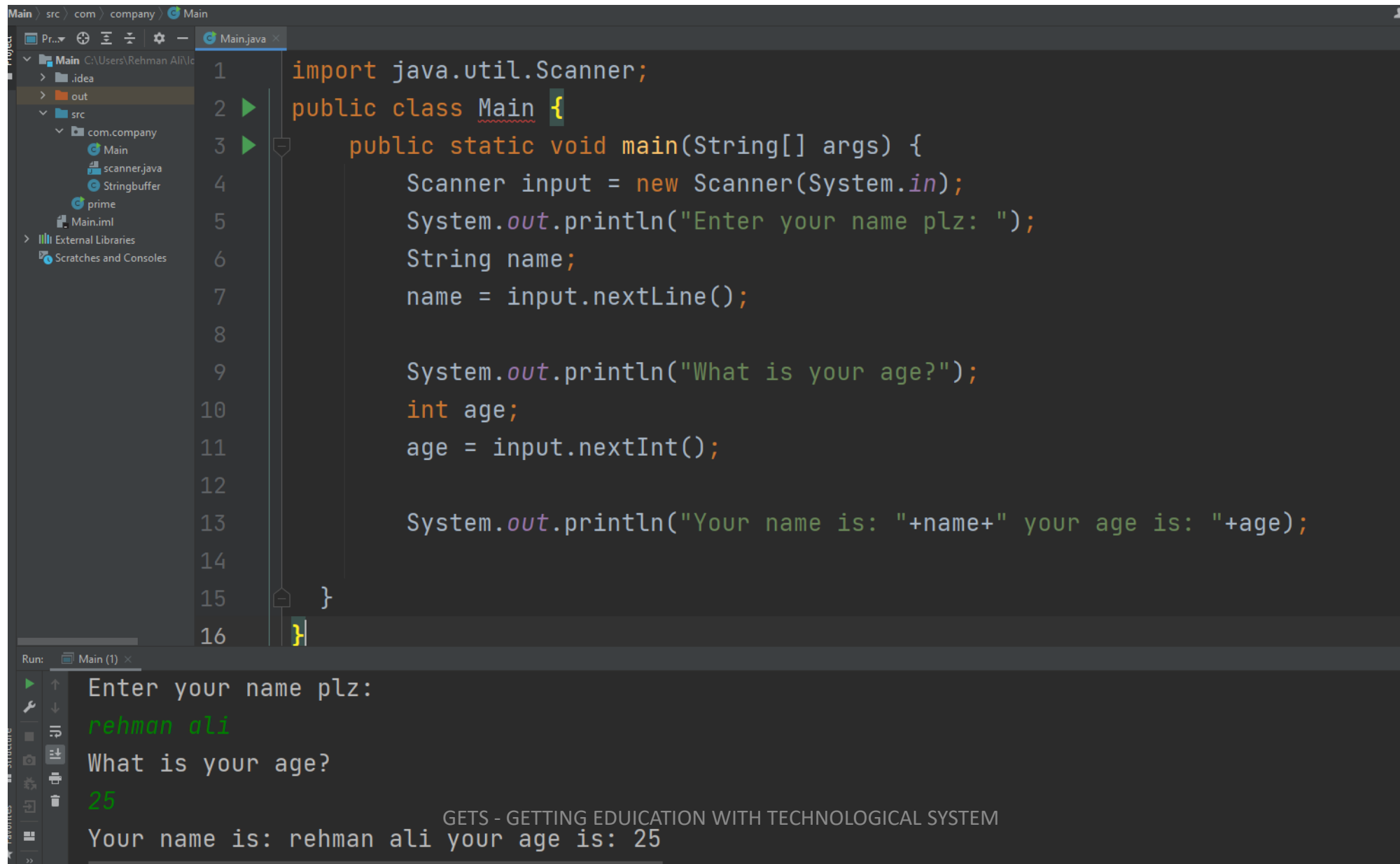
For getting numbers input from user we will use int and nextInt method.



```
4 public static void main(String[] args) {  
5     Scanner input = new Scanner(System.in);  
6  
7     System.out.println("Enter your name plz: ");  
8     String name;  
9     name = input.nextLine();  
10  
11     System.out.println("What is your age?");  
12     int age;  
13     age = input.nextInt();  
14
```

GETS - GETTING EDUCATION WITH TECHNOLOGICAL SYSTEM

In this way we will use scanner for getting input from users



The screenshot displays an IDE with a project named 'Main' in the 'src' directory. The file 'Main.java' is open, showing the following code:

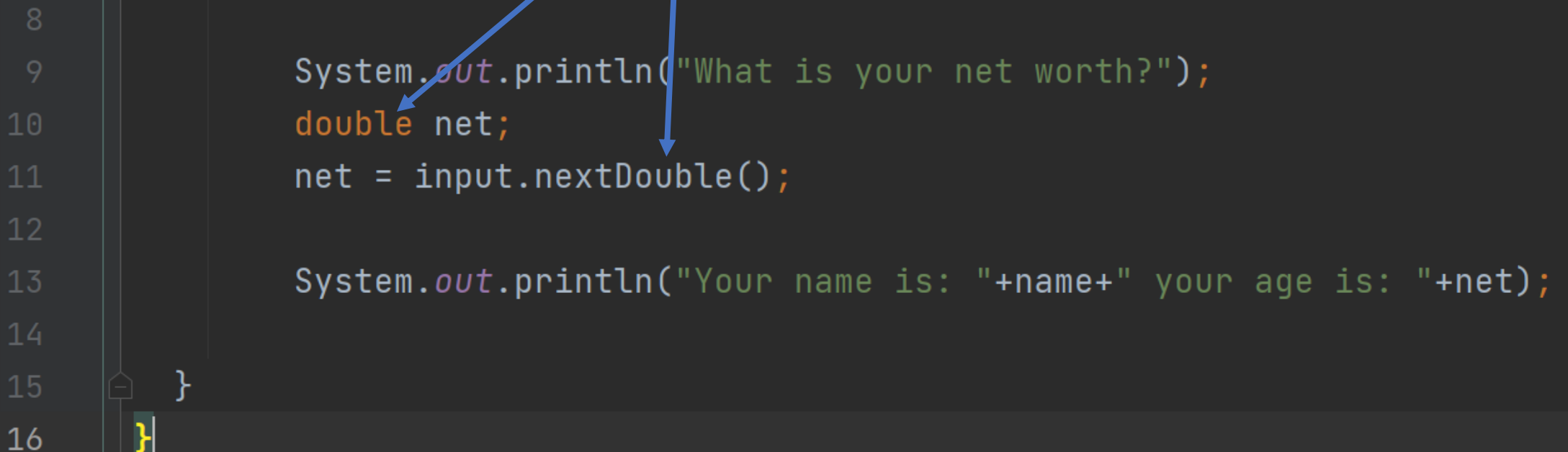
```
1 import java.util.Scanner;
2 public class Main {
3     public static void main(String[] args) {
4         Scanner input = new Scanner(System.in);
5         System.out.println("Enter your name plz: ");
6         String name;
7         name = input.nextLine();
8
9         System.out.println("What is your age?");
10        int age;
11        age = input.nextInt();
12
13        System.out.println("Your name is: "+name+" your age is: "+age);
14    }
15 }
```

The 'Run' window at the bottom shows the program's execution output:

```
Enter your name plz:
rehman ali
What is your age?
25
Your name is: rehman ali your age is: 25
```

Below the output, the text 'GETS - GETTING EDUCATION WITH TECHNOLOGICAL SYSTEM' is visible.

If you want to use others data type you will write that data type in your next method



```
8
9      System.out.println("What is your net worth?");
10     double net;
11     net = input.nextDouble();
12
13     System.out.println("Your name is: "+name+" your age is: "+net);
14
15 }
16 }
```

Enter your name plz:

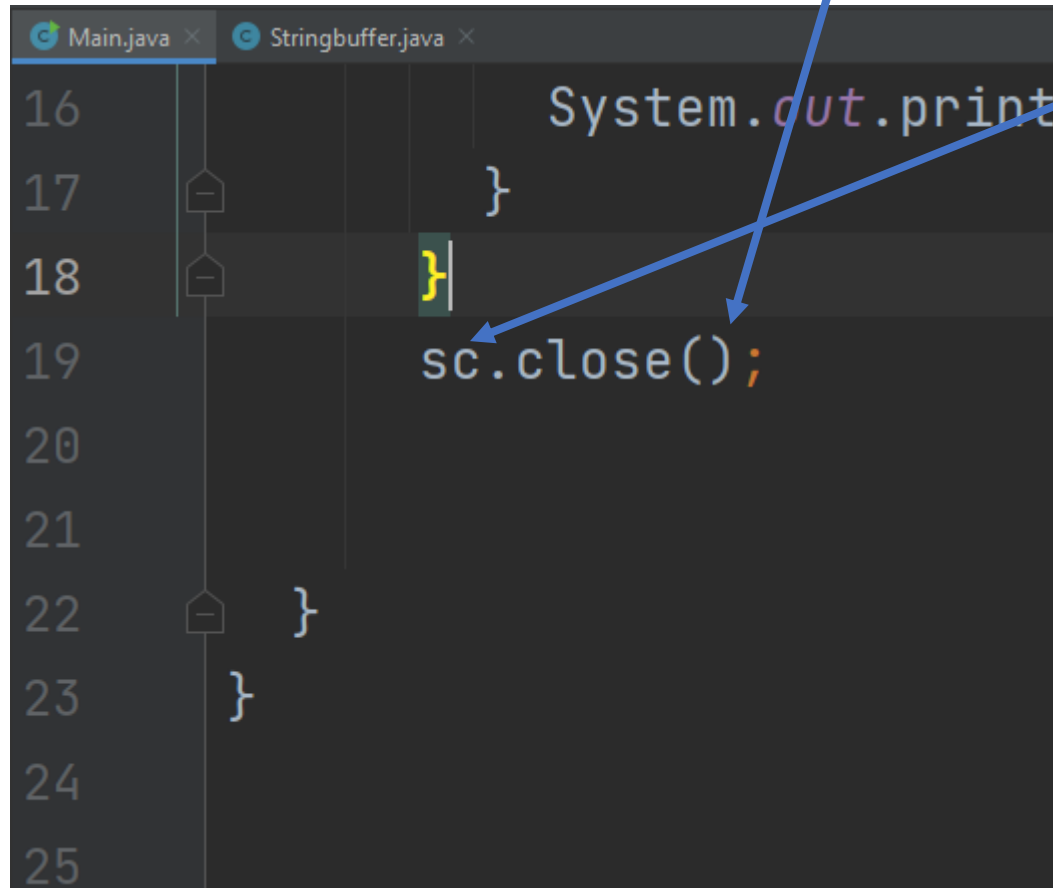
rehman ali

What is your net worth?

12000.124

Your name is: rehman ali your age is: 12000.124

To exit the program use close() function



```
16      System.out.println("Enter a string:");
17  }
18  }
19  sc.close();
20
21
22  }
23  }
24
25
```

Object name

Assignment

- Create a program that will ask from user that:

1. Enter your name
2. Enter your age
3. Enter your email
4. Enter you address
5. Enter your Salary in decimal digits

then it will display all results

NOTE:

- When ever you use after `nextLine()` method the program skip and jump into another block of code for that , write `nextLine()` method in `nextInt()` method in above of your code