

UNIT V(B) INPUT IN JAVA

Java language allows user to enter data for processing in the following ways:

- Using Function Argument
- Using InputStreamReader Class
- Using Scanner Class
- Using Command Line Argument

1. Using Function Argument

```
public returnType functionName(dataType parameter1,  
    dataType parameter2, ...) {  
    // function body  
    // use parameter1, parameter2, ... to process input  
}
```

2. Using InputStreamReader Class

```
import java.io.*;  
  
public class MyClass {  
    public static void main(String[] args) throws IOException {  
        BufferedReader reader = new BufferedReader(new  
        InputStreamReader(System.in));  
  
        // read integer input  
  
        int num = Integer.parseInt(reader.readLine());  
  
        // read string input  
  
        String str = reader.readLine();  
  
        // use input values    }}
```

3. Using Scanner Class

```
import java.util.Scanner;

public class MyClass {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // read integer input

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

        int num = scanner.nextInt();

        // read string input

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

        String str = scanner.nextLine();

        // use input values

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

    }

}
```

4. Using Command Line Argument

```
public class MyClass {

    public static void main(String[] args) {

        int num = Integer.parseInt(args[0]);

        // use input values

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

    }

}
```

Types of Errors

1. **Syntax Error** - Those errors occur due to the grammatical errors in the programming language. It may be missing of punctuation sign, incorrect instructions, undefined variable etc.
2. **Logical Error** – The error which occurs in the programming logic is called logical error.
3. **Run Time Error** - It is the type of error that occurs during the runtime when the compiler does not respond properly while executing a statement.