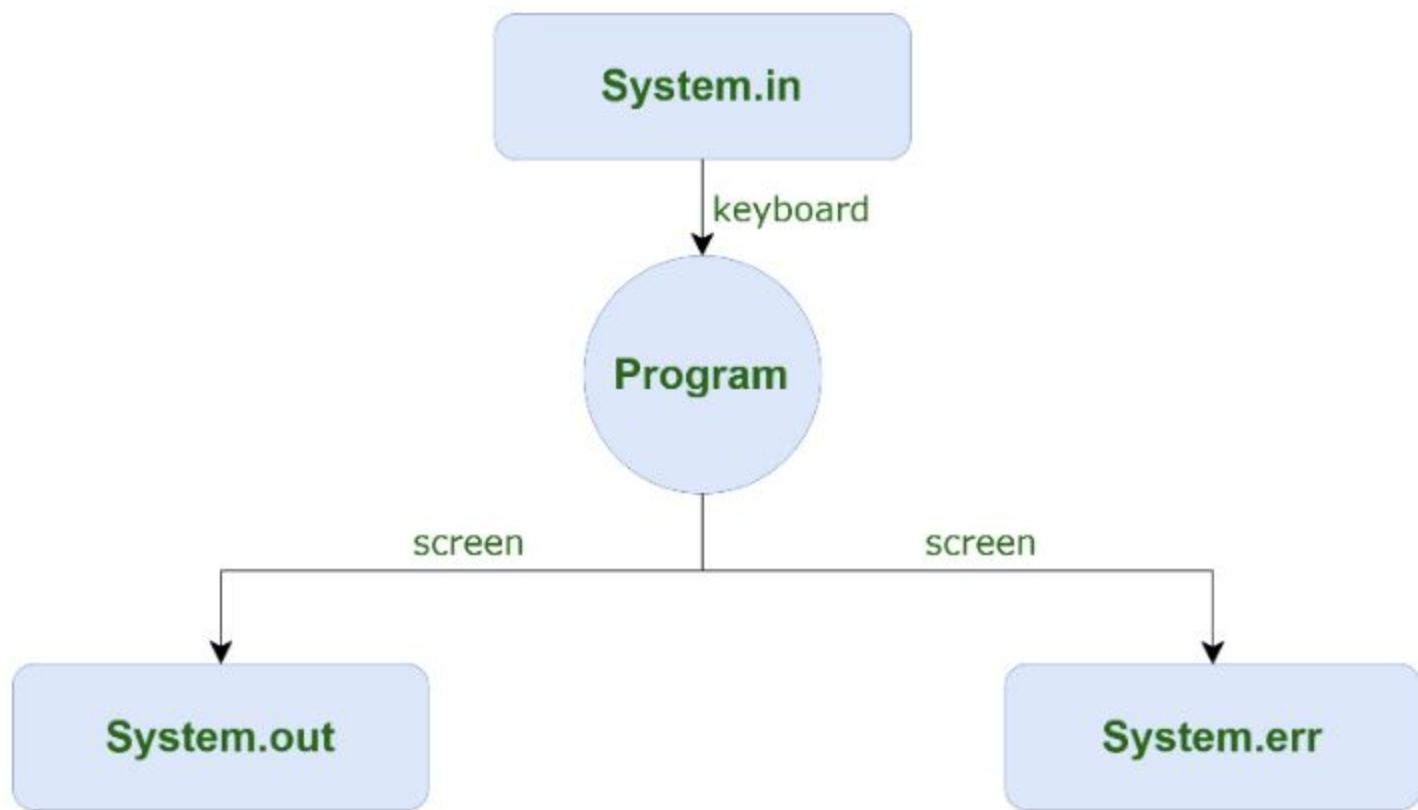# Lecture 8

Input Output

Standard I/O Streams in Java

Input Stream -

Output Stream -

My name is Ishan Sharma - This will be an input stream of characters where characte 'M' will be followed by 'y' …. 'A'

123445678990928248428

System.out.println();

- **System.in :** Read data from keyboard // Standard Input Stream
- **System.out:** Display data on the screen/console window // Standard Output Screen
- **System.err:** Display the error message on screen // Standard Output Stream

Streams can be combined

Scanner

```java
Scanner input = new Scanner(System.in);

double var1 = input.nextDouble();
System.out.println("var1 is " + var1);

int var2 = input.nextInt();
System.out.println("var2 is " + var2);



String var3 = input.nextLine();
System.out.println("var3 is " + var3);
```

Different methods in Scanner class

- nextLine(); //to take in String
- nextInt();//to take in Integer
- nextFloat();//to take in float
- nextBoolean;//to take in bool
- nextDouble; //to take in double

Output

```java
String firstName = "Ishan";
String lastName = "Sharma";
String fullName = firstName + " " + lastName;
int age = 33;
String location = "Amsterdam";

// System.out.println("My name is " + fullName);

System.out.printf( "My name is %s %s and my age is %s and location is %s" ,
firstName, lastName, age, location);
// format specifier
// %s for String
// %d for integer
// %f for floating
```