Assignment-5

DETERMINE THE TYPE OF PRIMITIVE VALUE AND CONVERT TO ITS WRAPPER CLASS VALUE:

CODE:

```java
package Assignment5;
import java.util.Scanner;
public class WrapperClassConvert {
    public Object convertToWrapper(Object input) {  1 usage
        if (input == null || !isPrimitive(input)) {
            return "Give proper primitive type as input";
        }
        if (input instanceof Integer) {
            return ((Integer) input).intValue();
        } else if (input instanceof Long) {
            return ((Long) input).longValue();
        } else if (input instanceof Double) {
            return ((Double) input).doubleValue();
        } else if (input instanceof Float) {
            return ((Float) input).floatValue();
        } else if (input instanceof Character) {
            return ((Character) input).charValue();
        } else if (input instanceof Boolean) {
            return ((Boolean) input).booleanValue();
        } else if (input instanceof Short) {
            return ((Short) input).shortValue();
        } else if (input instanceof Byte) {
            return ((Byte) input).byteValue();
        }
        return null;
    }
```

```java
    private boolean isPrimitive(Object input) {  1 usage
        return input instanceof Integer ||
                input instanceof Long ||
                input instanceof Double ||
                input instanceof Float ||
                input instanceof Character ||
                input instanceof Boolean ||
                input instanceof Short ||
                input instanceof Byte;
    }
```

```java
    public static void main(String[] args) {
        WrapperClassConvert converter = new WrapperClassConvert();
        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter a primitive value:");
        if (scanner.hasNext()) {
            Object input = null;
            if (scanner.hasNextInt()) {
                input = scanner.nextInt();
            } else if (scanner.hasNextLong()) {
                input = scanner.nextLong();
            } else if (scanner.hasNextDouble()) {
                input = scanner.nextDouble();
            } else if (scanner.hasNextFloat()) {
                input = scanner.nextFloat();
            } else if (scanner.hasNextBoolean()) {
                input = scanner.nextBoolean();
            } else if (scanner.hasNext()) {
                input = scanner.next();
            }
            System.out.println(converter.convertToWrapper(input));
        } else {
            System.out.println("Give proper primitive type as input");
        }
    }
}
```

Output1:

```
"C:\Program Files\Java\jdk-20\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2024.1\lib\idea_rt.jar=62115:C:\Program Files\JetBrains\IntelliJ IDEA 2024.1\bi
Enter a primitive value: 123
Expected output:123

Process finished with exit code 0
```

Output2:

```
"C:\Program Files\Java\jdk-20\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2024.1\lib\idea_rt.jar=62094:C:\Program Files\JetBrains\IntelliJ IDEA 2024.1\bi
Enter a primitive value:
"SAI"
Please enter a proper primitive type as input.

Process finished with exit code 0
```