1. What do Java Wrapper classes do?

2. List the eight primitive data types in Java.

3. Why do we need Wrapper classes?

4. What is autoboxing?

5. What is unboxing?

6. Explain the purpose of the valueOf() method in Wrapper classes.

7. Differentiate between == and equals() when comparing Wrapper objects.

8. Can you explain the significance of the hashCode() method in Wrapper classes?

The hashCode() method returns the hash code value for the object, which is crucial for hashing-based data structures like HashMap.

9. How can you convert a Wrapper object to a primitive data type?

10. Discuss the parseInt() method in the Integer class.

The parseInt() method is used to convert a String to an int primitive.

```
String numStr = "123";
int num = Integer.parseInt(numStr);
```

11. Explain the compareTo() method in the Comparable interface.

The compareTo() method is used to compare two Wrapper objects and returns a negative, zero, or positive value based on their order.

```
Integer a = 10;
Integer b = 5;
System.out.println(a.compareTo(b)); // 1 (a > b)
```

12. How do you check if a given string is a valid representation of a particular primitive type?

13. Explain the purpose of the Boolean class in Java.

15. How can you convert a boolean primitive to a Boolean object?

16. Explain the toString() method in Wrapper classes.

The toString() method returns a string representation of the object, which is useful for printing or logging.


```
Integer num = 42;
System.out.println(num.toString()); // "42"
```

20. How can you convert a Wrapper object to a String?

We can use the toString() method or simply concatenate it with an empty string.

```
Integer num = 42;
String numStr = num.toString();
// or
String numStr2 = num + "";
```

21. Explain the toBinaryString() method in the Integer class.

The toBinaryString() method converts an int to a binary string representation.

```
int num = 42;
String binaryStr = Integer.toBinaryString(num);
```

22. What is the purpose of the MAX_VALUE and MIN_VALUE constants in Wrapper classes?

These constants represent the maximum and minimum values of the primitive data types.

```
System.out.println(Integer.MAX_VALUE); // 2147483647
System.out.println(Integer.MIN_VALUE); // -2147483648
```

23. Discuss the parseXxx() methods in Wrapper classes.

The parseXxx() methods (e.g., parseInt(), parseDouble()) are used to convert a String to the corresponding primitive type.

```
String numStr = "42";
int num = Integer.parseInt(numStr);
```

24. How can you create a BigInteger object from a String?

26. Explain the valueOf() method in the BigDecimal class.

28. Can you use Wrapper classes in a switch statement?