1. What are the 8 data types that use in Java?

Certainly! In Java, these are the primitive data types:

byte: It is a signed 8-bit integer. Its range is from -128 to 127.

short: It is a signed 16-bit integer. Its range is from -32,768 to 32,767.

int: It is a signed 32-bit integer. Its range is from -2^31 to 2^31 - 1.

long: It is a signed 64-bit integer. Its range is from -2^63 to 2^63 - 1.

float: It is a single-precision 32-bit floating-point. It can represent fractional numbers and has a larger range than integers.

double: It is a double-precision 64-bit floating-point. It has a higher precision and range than float.

char: It represents a single 16-bit Unicode character. It can hold any character from the Unicode character set.

boolean: It represents a boolean value, either `true` or `false`.

1. Why char uses 2 bytes in java and what is \u0000?

In Java, characters are represented using Unicode, which is a 16-bit character set. Therefore, the char data type uses 2 bytes to accommodate a wide range of characters.

\u0000 represents the Unicode character 'null' (null character). It is used to denote the end of a string in Java.

1. what is the use of static and final keyword in java with proper examples.

**static:** Used to create class-level variables and methods. It belongs to the class rather than the instance of the class.

java

class StaticExample {

static int count = 0;

StaticExample() {

count++;

}

public static void main(String[] args) {

StaticExample obj1 = new StaticExample();

StaticExample obj2 = new StaticExample();

System.out.println("Count: " + count); // Output: 2

}

}

**final**: Used to declare constants, make methods unmodifiable, or prevent inheritance.

java

final class FinalExample {

final int MAX\_VALUE = 100;

final void display() {

System.out.println("This is a final method");

}

}