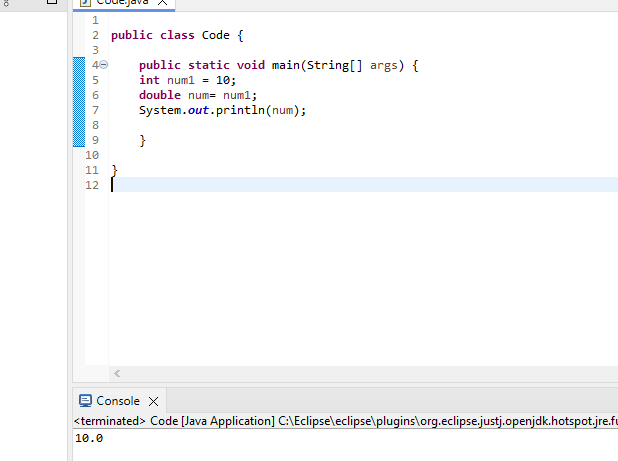
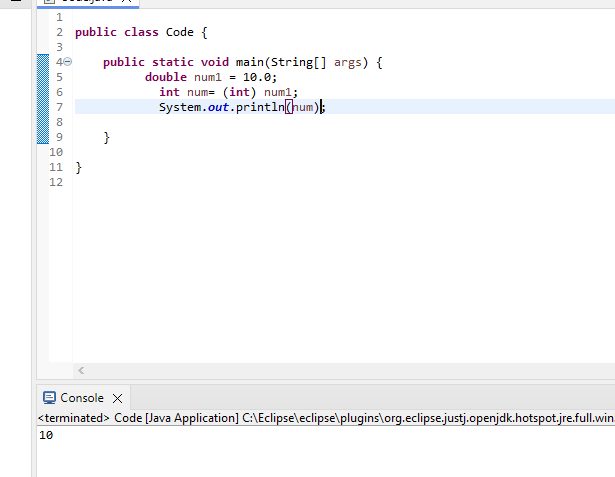
**Assignment 3**

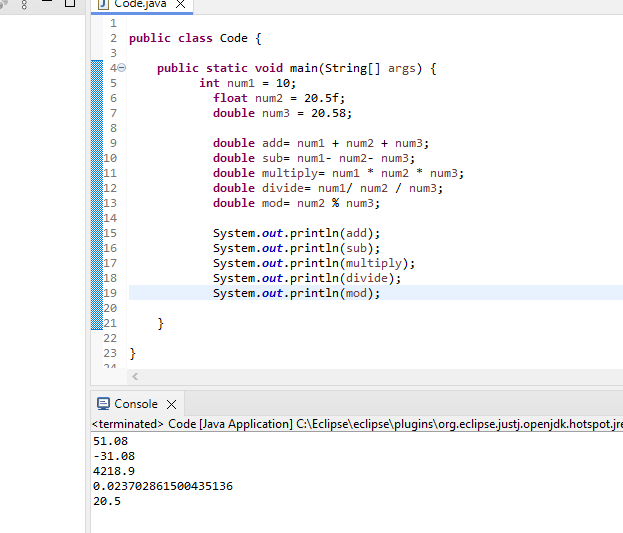
1) Write a program that demonstrates widening conversion from int to double and prints the result.

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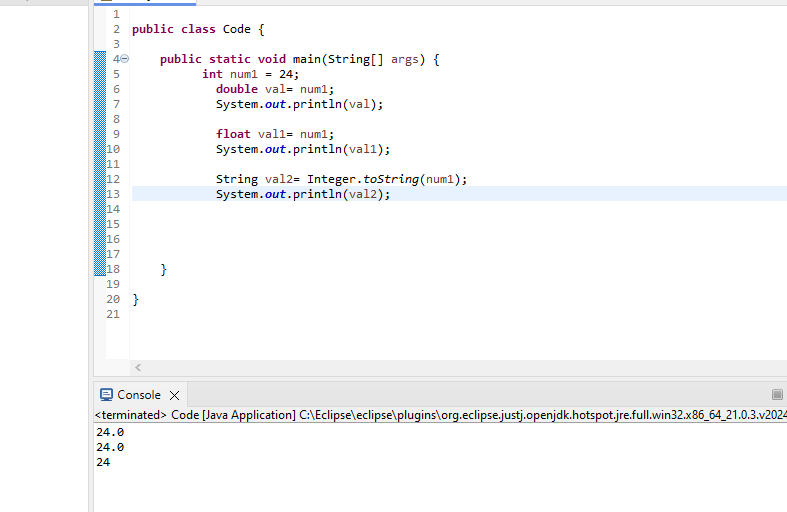
2) Create a program that demonstrates narrowing conversion from double to int and prints the result.



3 Write a program that performs arithmetic operations involving different data types (int, double, float) and observes how Java handles widening conversions automatically

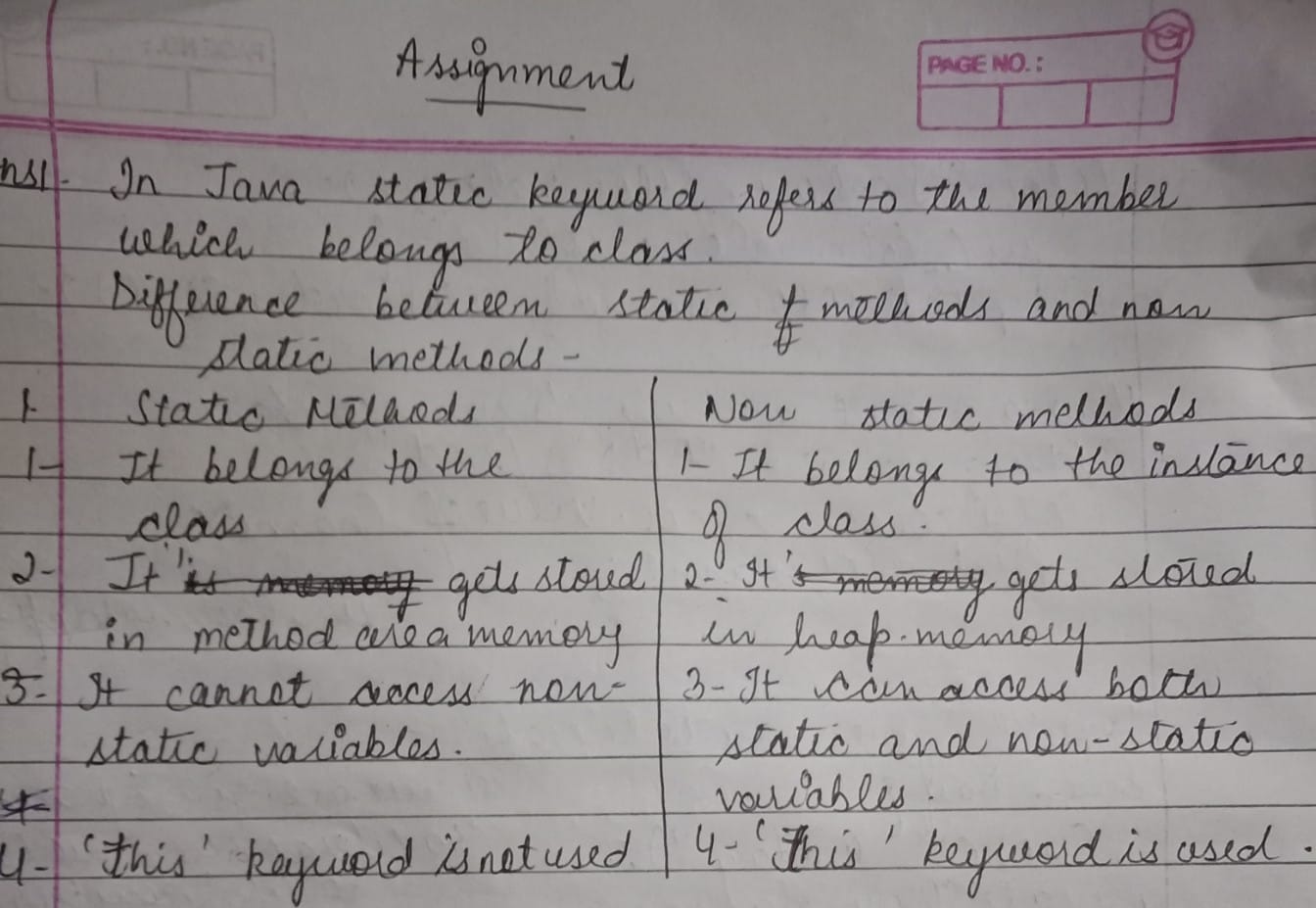


4) Write a Program that demonstrates widening conversion from int to (double,float, boolean, string) and prints the result.

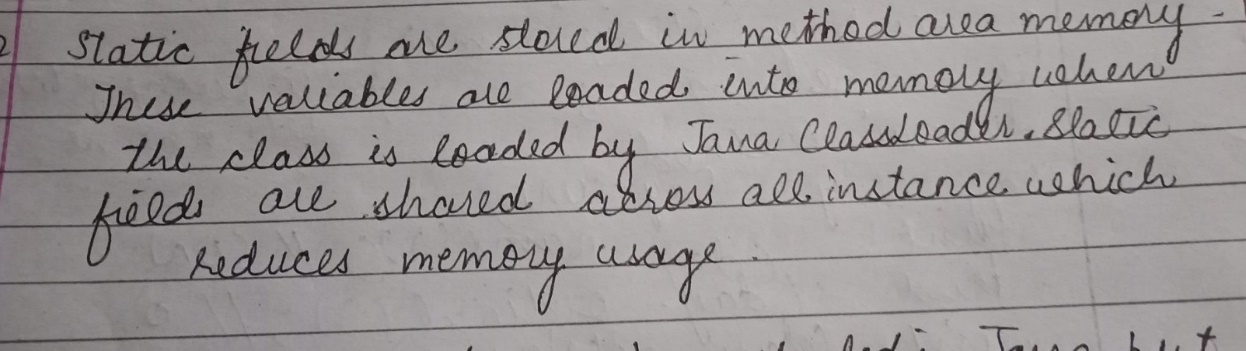


**Interview Questions**

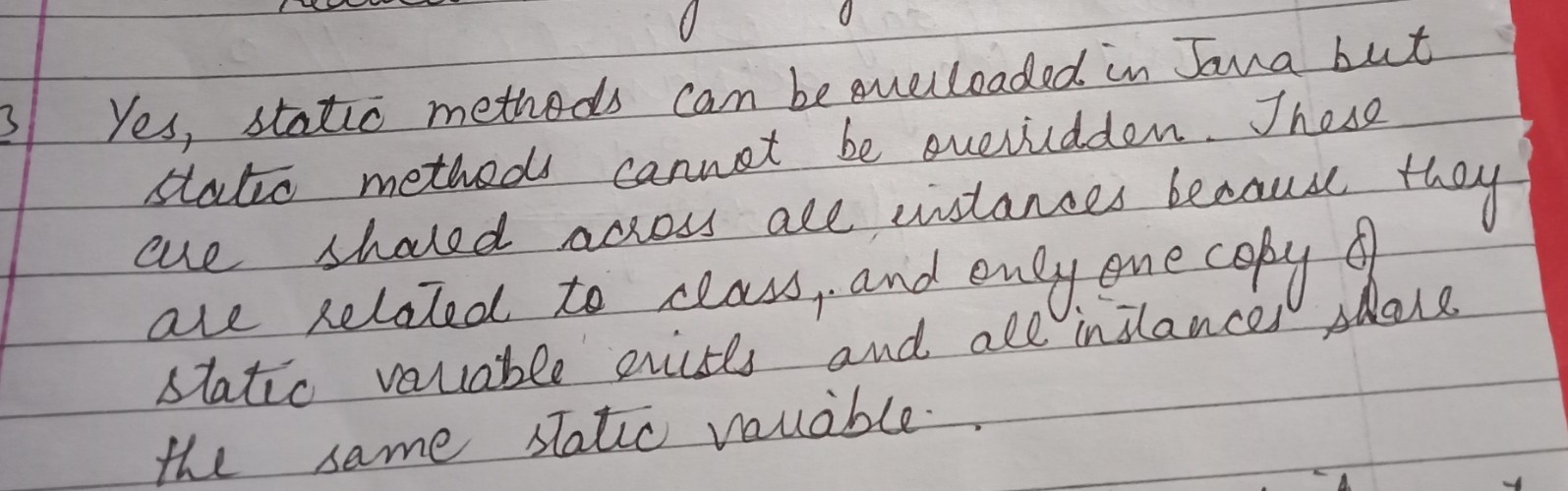
1. **What does the static keyword mean in Java? Explain the difference between static and non-static methods.**

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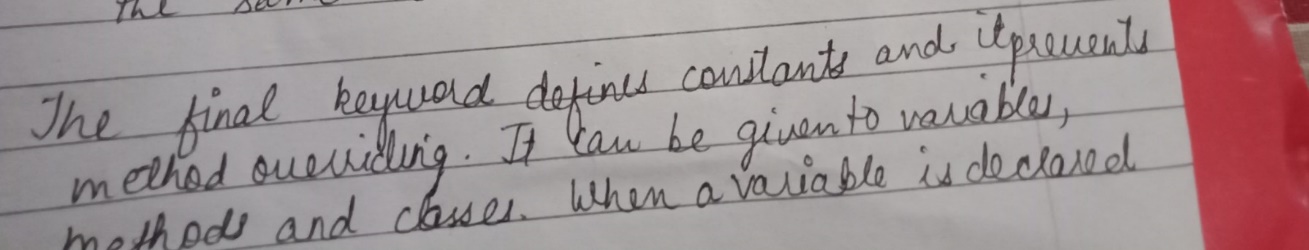
1. **What is the role of the static keyword in the context memory management.**

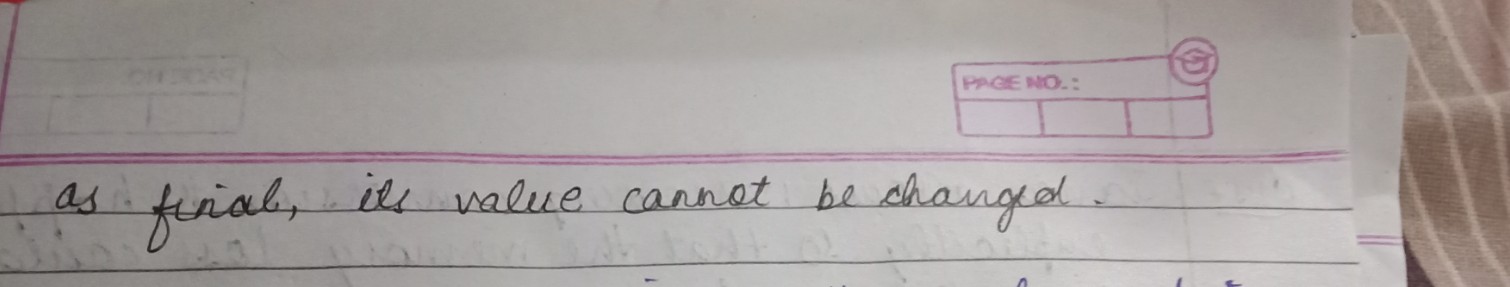
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1. **Can static methods be overloaded and overridden in Java?Howstatic variables shared across multiple instances of a class?**

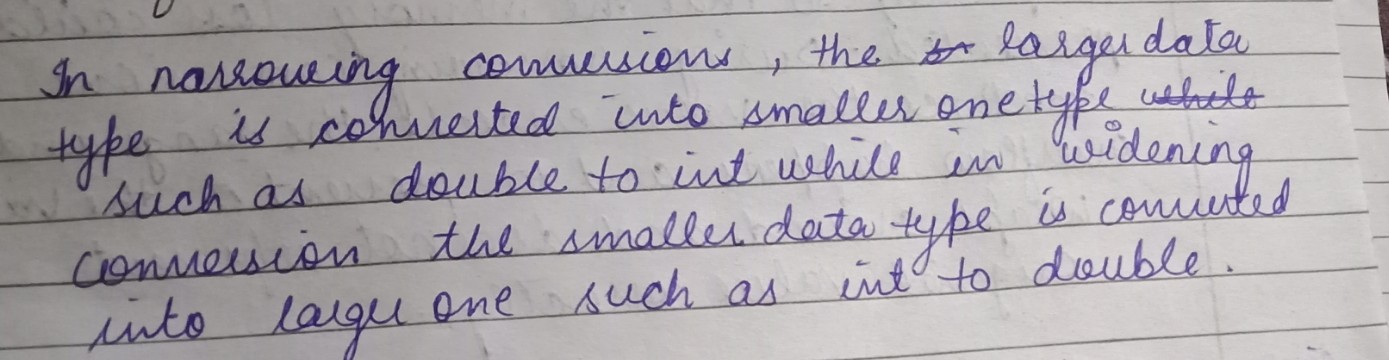
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1. **What is the significance of the final keyword in Java?**

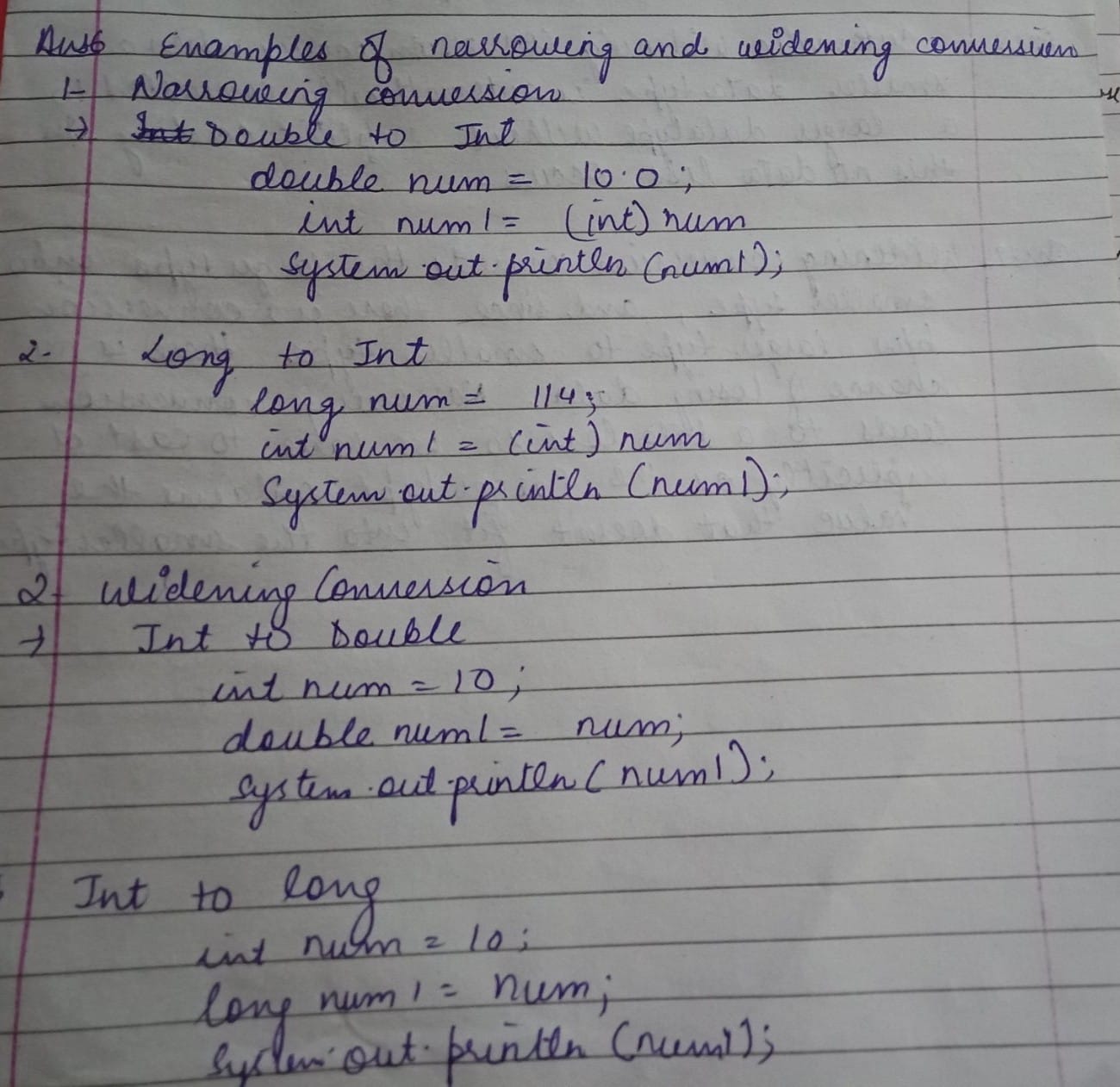
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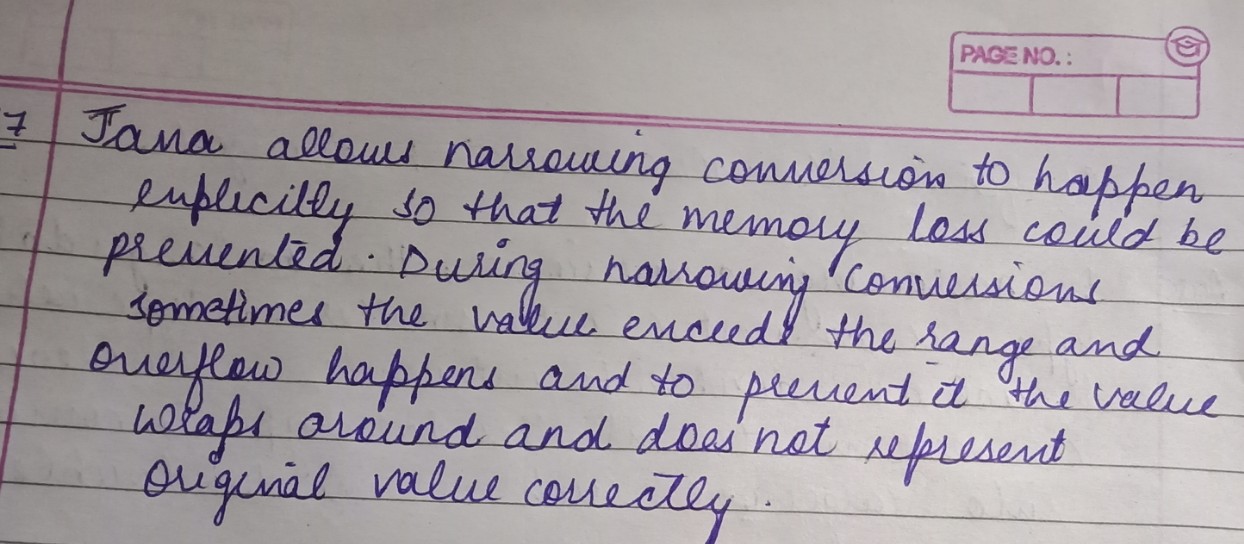
1. **What are narrowing and widening conversions in Java?**

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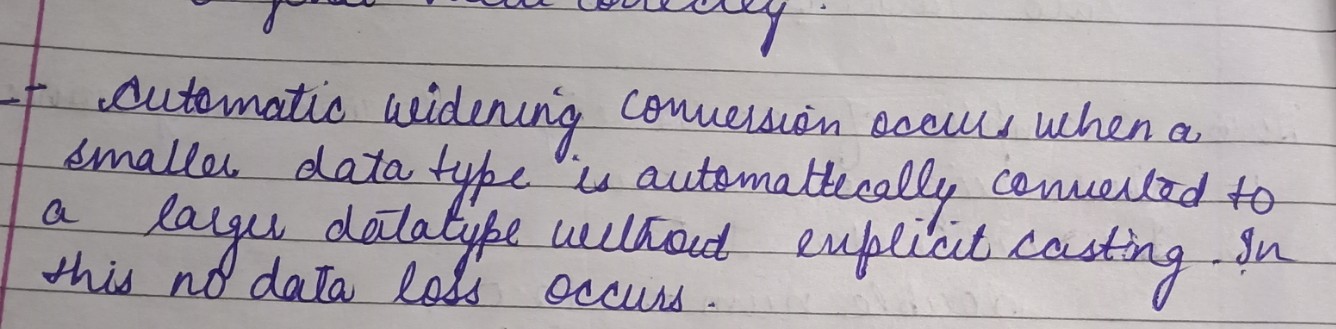
1. **Provide examples of narrowing and widening conversions between primitive data types.**



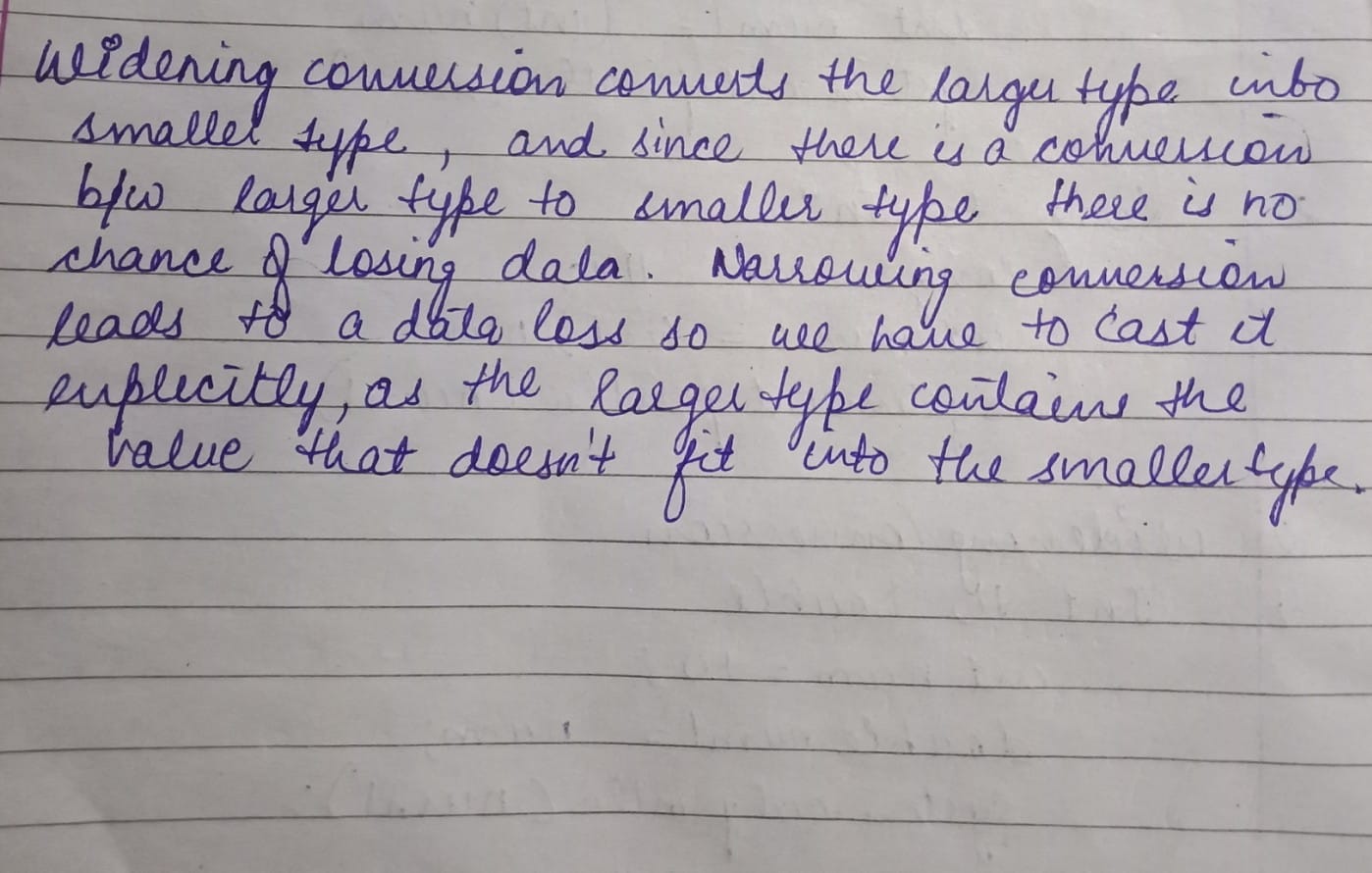
1. **How does Java handle potential loss of precision during narrowing conversions?**

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1. **Explain the concept of automatic widening conversion in Java.**

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1. **What are the implications of narrowing and widening conversions on type compatibility and data loss?**

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