**Assignment No- 4**

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

public class WideningConversion {

public static void main(String[] args) {

int intValue = 10;

double doubleValue = intValue;

System.out.println("Original int value: " + intValue);

System.out.println("Converted double value: " + doubleValue);

}

}

OUTPUT:-

Original int value: 10

Converted double value: 10.0

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

public class NarrowingConversion {

    public static void main(String[] args) {

        double doubleValue = 10.5;

        int intValue = (int) doubleValue; // narrowing conversion from double to int

        System.out.println("Original double value: " + doubleValue);

        System.out.println("Converted int value: " + intValue);

    }

}

OUTPUT:-

Original double value: 10.5

Converted int value: 10

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

public class ArithmeticOperations {

public static void main(String[] args) {

int intValue = 10;

double doubleValue = 20.5;

float floatValue = 30.25f;

int result1 = intValue + intValue;

System.out.println("int + int = " + result1);

// int + double = double (widening conversion)//

double result2 = intValue + doubleValue;

System.out.println("int + double = " + result2);

// int + float = float (widening conversion)

float result3 = intValue + floatValue;

System.out.println("int + float = " + result3);

// double + float = double (widening conversion )

double result4 = doubleValue + floatValue;

System.out.println("double + float = " + result4);

}

}

OUTPUT:-

int + int = 20

int + double = 30.5

int + float = 40.25

double + float = 50.75

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

public class WideningConversion {

public static void main(String[] args) {

int intValue = 10;

double doubleValue = intValue;

System.out.println("Widening conversion from int to double: " + doubleValue);

float floatValue = intValue;

System.out.println("Widening conversion from int to float: " + floatValue);

String stringValue = String.valueOf(intValue);

System.out.println("Widening conversion from int to String: " + stringValue);

}

}

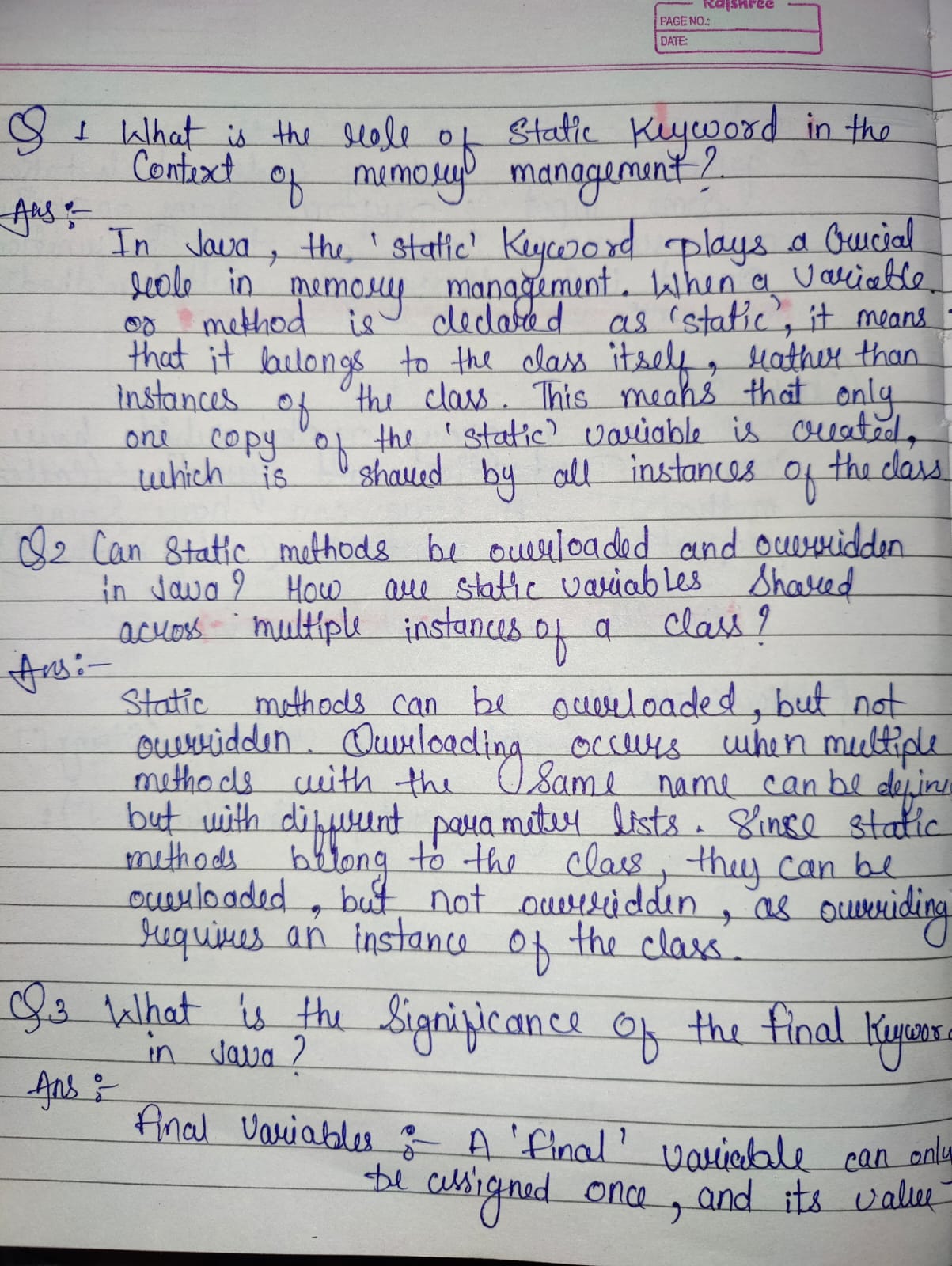
OUTPUT:-

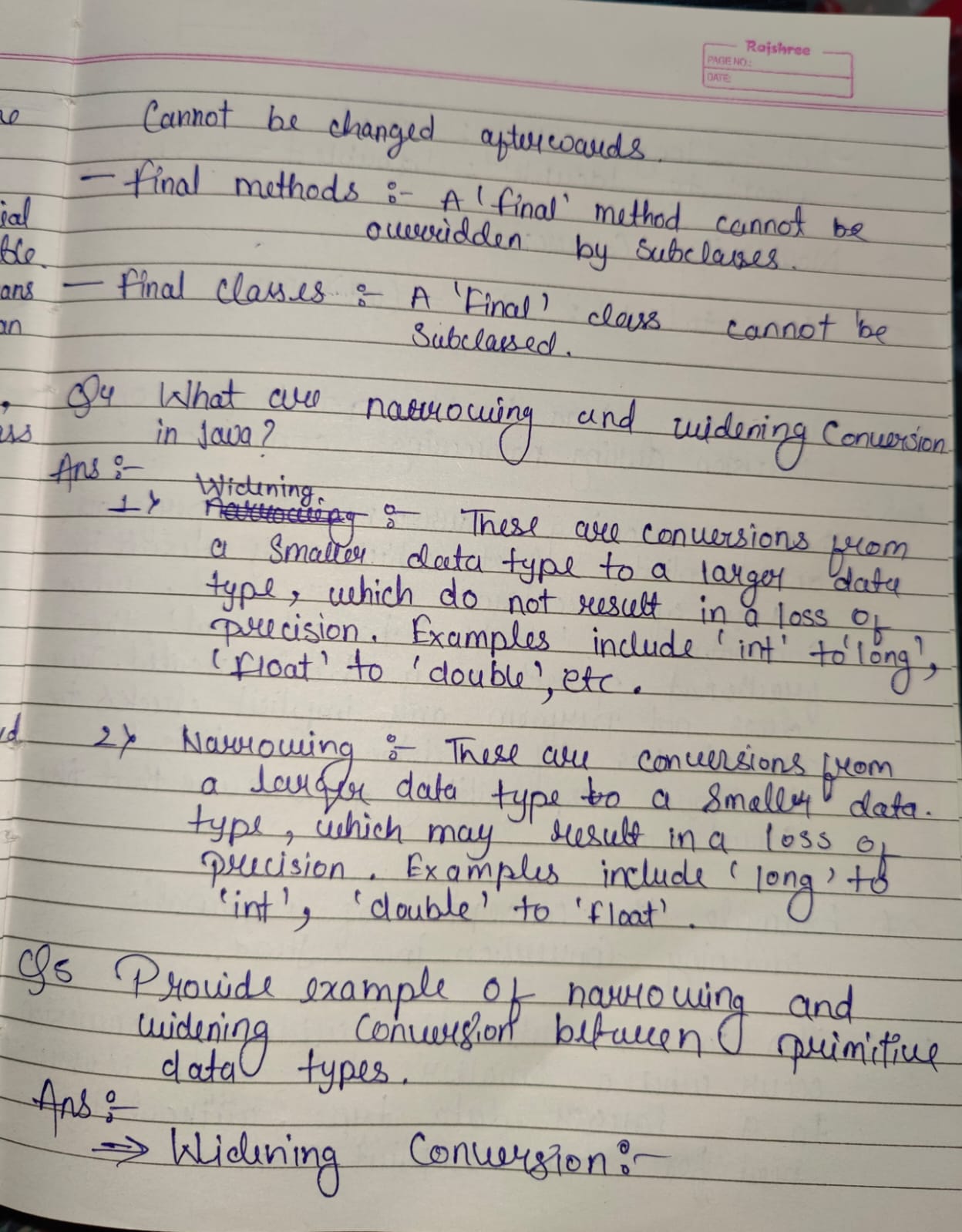
Widening conversion from int to double: 10.0

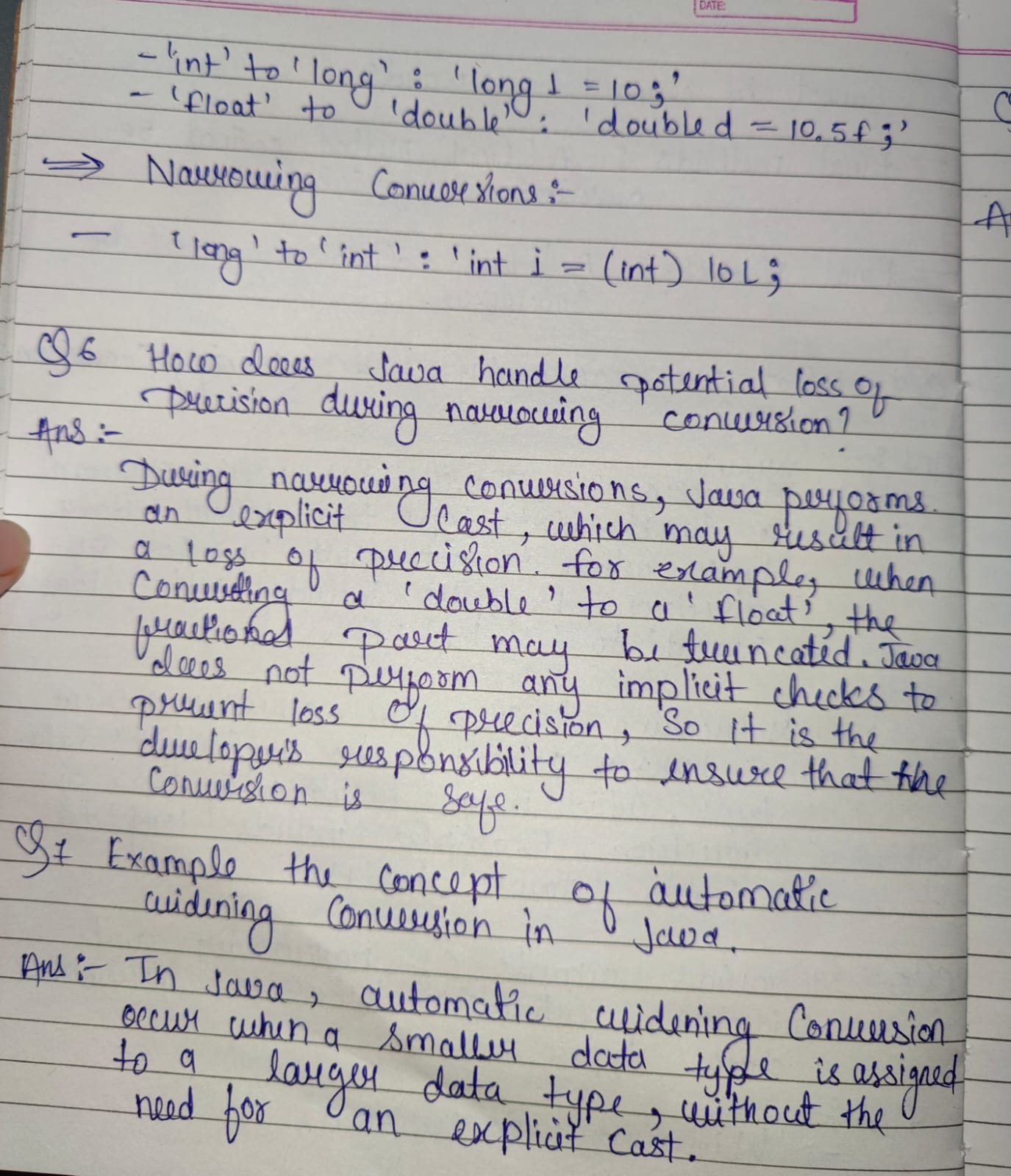
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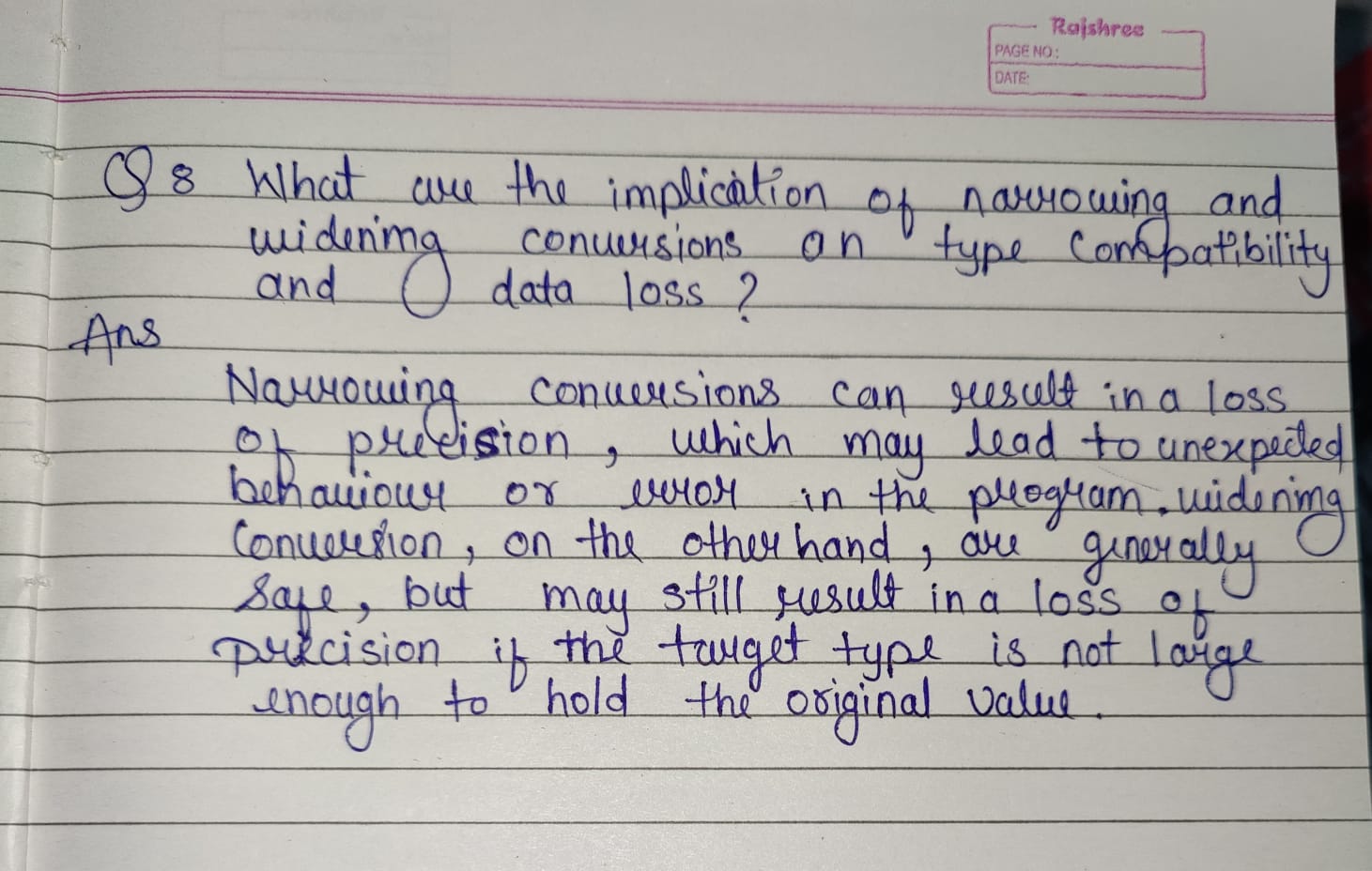
Widening conversion from int to String: 10

**Interview Questions**

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