1) Write Java statements that accomplish each of the following tasks:

a) Display the message "Enter an integer:", leaving the cursor on the same line.

Text

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b) Assign the product of variables b and c to the int variable a

**int a = b \* c;**

c) Use a comment to state that a program performs a sample payroll calculation.

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2) What is a default constructor?

**A default constructor is a type of constructor that is automatically created by the Java compiler in the absence of any explicit constructor definitions in the class.**

How are an object’s instance variables initialized if a class has only a default constructor?

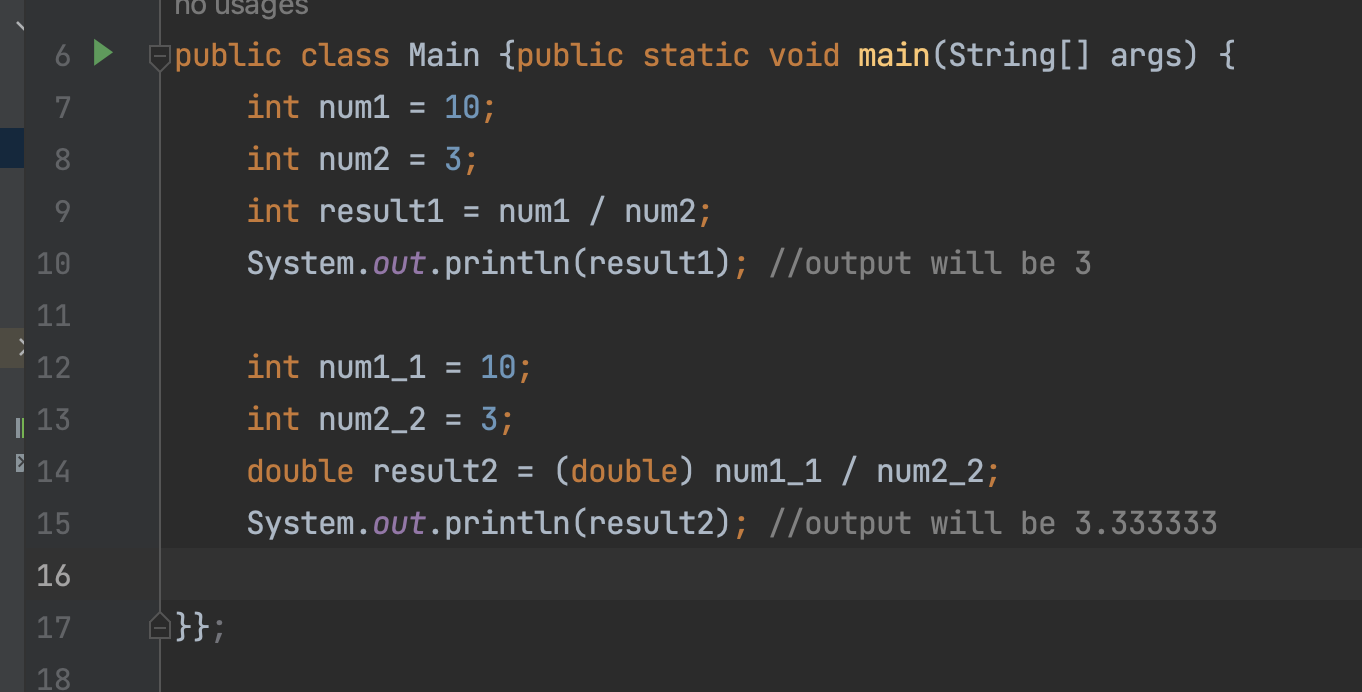
Text

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3) Explain what happens when a Java program attempts to divide one integer by another. What happens to the fractional part of the calculation?

**When we divide int by int value the output will be integer**

How can you avoid that outcome? **To avoid outcome we need to use for example double**



4) What is the value of x after each of the following statements is executed?

a. double x = Math.abs(7.5); **output 🡪 7.5**

b. double x = Math.floor(7.5); **output 🡪 7.0**

c. double x = Math.abs(0.0); **output 🡪 0.0**

d. double x = Math.ceil(0.0); **output 🡪 0.0**

e. double x = Math.abs(-6.4); **output 🡪 6.4**

f. double x = Math.ceil(-6.4); **output 🡪 -6.0**

g. double x = Math.ceil(-Math.abs(-8 + Math.floor(-5.5))); **output 🡪 -14.0**

5) Write statements that perform the following one-dimensional-array operations:

a. Set the 10 elements of integer array counts to zero.

Text

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b. Add one to each of the 15 elements of integer array bonus.

Graphical user interface, text

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c. Display the five values of integer array bestScores in column format.

Text

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