

Program execution and the stack

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→ void main(String[] args) {  
    int a = 2, b = 3, c = 4;  
    int d = sum(a, b, c);  
    System.out.println(d);  
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void sum(int x, int y, int z) {  
    int result = add(x, y);  
    result = add(result, z);  
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void add(int x, int y) {  
    int result = x + y;  
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Stack:

- main: args = <reference>

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Stack:

- main: args = <reference>, a = 2

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Stack:

- main: args = <reference>, a = 2, b = 3

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- add: x = 2, y = 3

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Stack:

- main: args = <reference>, a = 2, b = 3, c = 4
- sum: x = 2, y = 3, z = 4
- add: x = 2, y = 3, result = 5

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Stack:

- main: args = <reference>, a = 2, b = 3, c = 4
- sum: x = 2, y = 3, z = 4, result = 5
- add: x = 5, y = 4, result = 9

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