

Java for Beginners

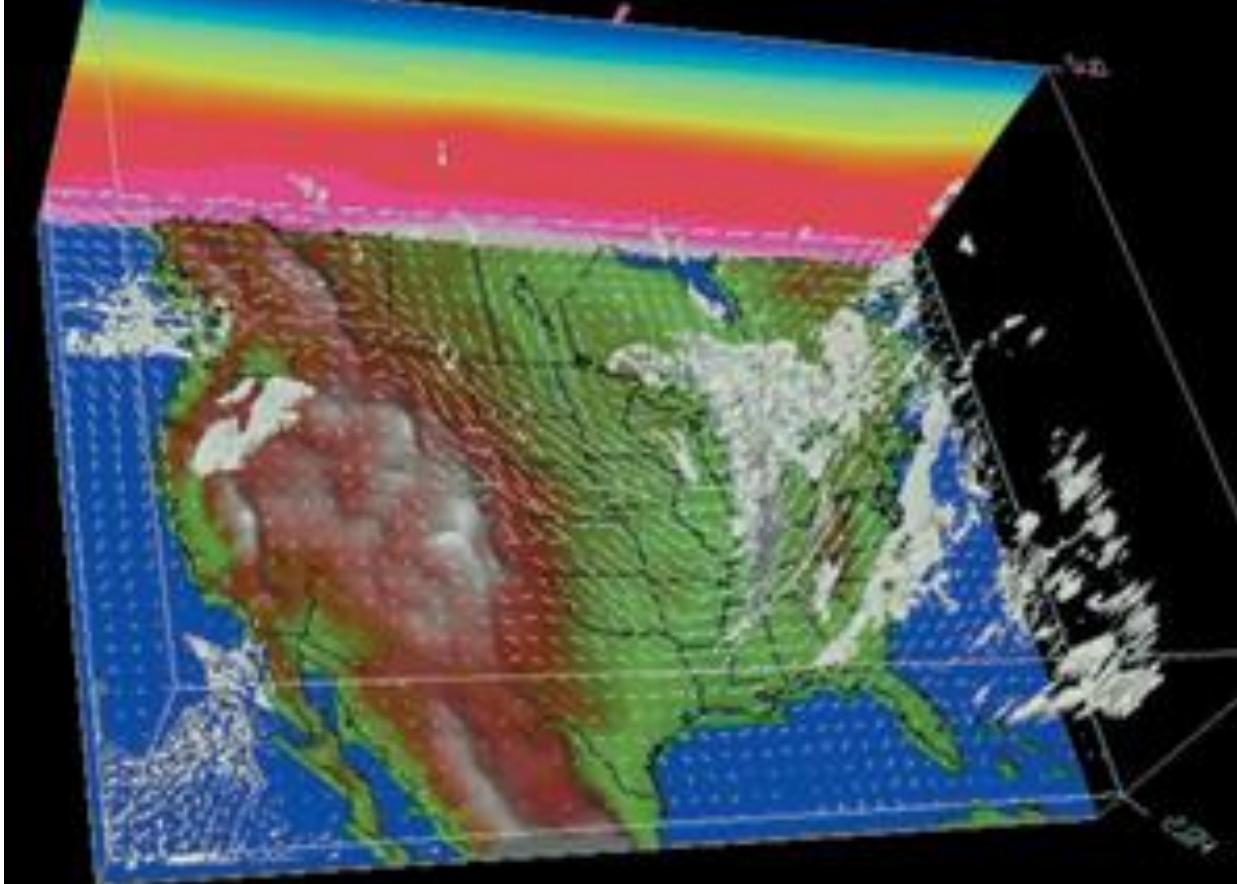
RANDOM NUMBERS

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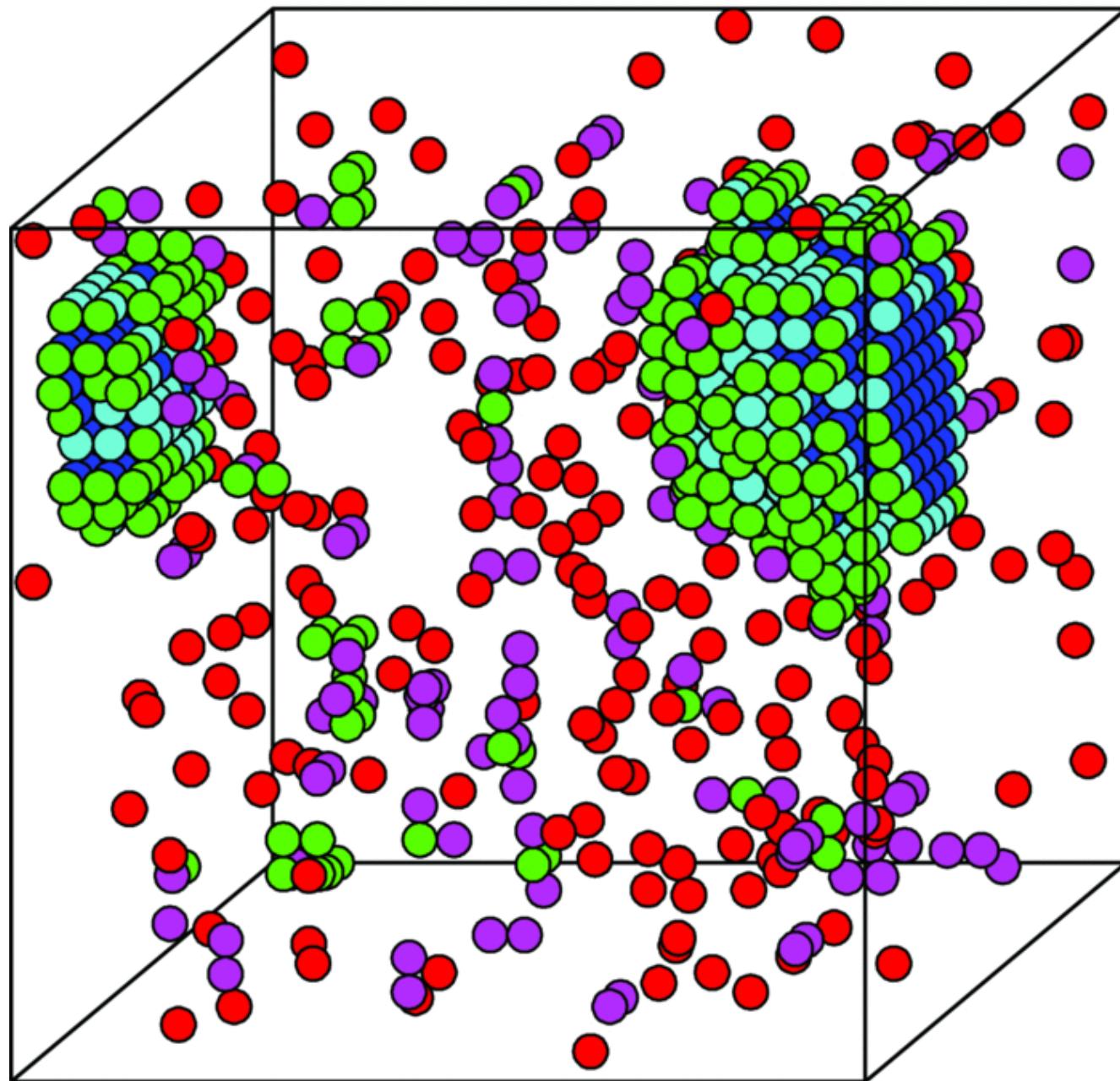
IEEE SENIOR MEMBER



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Thursday



Vis5D



`Math.random()
[0, 1)`

`Math.random()*6
[0, 6)`

`(int)(Math.random()*6)
{0, 1, 2, 3, 4, 5}`

`(int)(Math.random()*6)+1
{1, 2, 3, 4, 5, 6}`

`(int)(Math.random()*6)*2+1
{1, 3, 5, 7, 9, 11}`

`Math.random()*span`

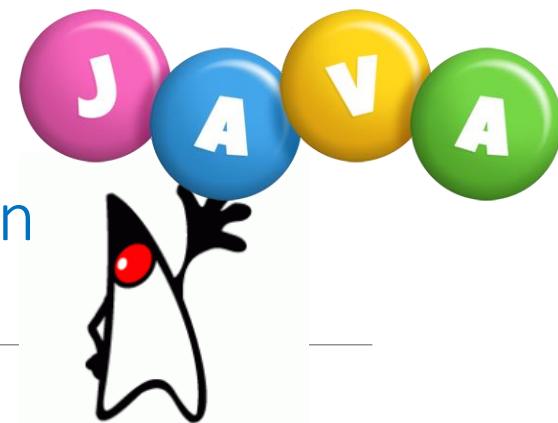
`(int)(Math.random()*count)`

`(int)(Math.random()*count)+base`

`(int)(Math.random()*count)*step+base`

Random Numbers

`Math.random()` generate a arbitrary double number between 0 and 1 (not including)



- **`Math.random()`:** generate a double value x in region $0 \leq x < 1$
- **`Math.random()*span`:** generate a double value x in region $0 \leq x < span$
- **`Math.random()*span + baseline`:** generate a double value x in region $baseline \leq x < baseline + span$
- **`(int) (Math.random())`:** generate a int value i in region $0 \leq i < 1$
- **`(int) (Math.random()*count)`:** generate a int value i in region $0 \leq i < count$
- **`(int) (Math.random()*count) + baseline`:** generate a int value i in region $baseline \leq i < baseline + count$
- **`(int) (Math.random()*count) *step + baseline`:** generate a int value i in region $baseline \leq i < baseline + count * step$, each two elements separated by step