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Andrei Pieleanu · Follow

Former Internship at GreenSoft (2018–2019) · 3y

**Why is  $2 * (i * i)$  faster than  $2 * i * i$  in Java?**

```

1 import java.util.Random;
2 public class Speedy {
3
4     public static void main(String[] args) {
5
6         long startTime =
7         System.nanoTime();
8
9         int n = 0;
10        for (int i = 0; i < 1000000000; i++) {
11            n += 2 * (i * i);
12        }
13        System.out.println( (System.nanoTime()
14        - startTime) / 1000000000.0 + " seconds");
15
16        startTime = System.nanoTime();
17        n = 0;
18        for (int i = 0; i < 1000000000; i++) {
19            n += 2 * i * i;
20        }
21        System.out.println( (System.nanoTime()
22        - startTime) / 1000000000.0 + " seconds");
23    }
24 }

```

If you run this example, you will observe that the first one is faster than the second one by a very small number of nanoseconds, which is almost negligible for day-to-day work. The reason hides behind the bytecode. When you run your class with the extension `java`, it will create a file with the extension `.class`, that's the bytecode. Practically, it's the code that JVM will create to execute the class and it's written.

For  $i * 2 * 2$  you have the following lines of bytecode:

```

1 ICONST_2
2 ILOAD 0
3 ILOAD 0
4 IMUL
5 IMUL
6 ISTORE 1

```

while for  $i * (2 * 2)$  you have:

```

1 ICONST_2
2 ILOAD 0
3 IMUL
4 ILOAD 0
5 IMUL
6 ISTORE 1

```

So yeah, this single line of code costs you some hundreds of nanoseconds, very dangerous if left unchecked :D

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79



6



5

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Loves to talk. Head of Content Marketing at Deel · 1y

Can a US Citizen working for a US company work remotely in another country without any tax implications in the new country?

If a US-based company allows its employees to work remotely, they can work from anywhere in the world. However, no matter what country you choose to work from, you can't legally avoid paying your income taxes one way or an (more)

3.9K 19 650



Clayton Paterson · Follow

Corporate Lawyer at Johnson & Johnson (company) · 1y

What's the best complete exercise methodology for a 60+ man in good health?

I'm 63 and feel terrific. I try to do 200 pushups everyday, plus crunches, sit-ups and leg raises. We should be exercising daily I believe. Our bodies were meant to be used. My pushups and ab work are my warm-up. Then, I have a 5 day c (more)



15.6K 134 362



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Karolina · Follow

Studied Social Science (Psychology) at University of Gdansk · Sep 4

Does a narcissist only target people with low self-esteem?

The narcissist did not pick you at random. You were not chosen by chance. They followed a system. They followed a plan. It was a conscious decision. They singled you out. They purposefully selected you as the object of their atter (more)



610 20 24



Josh Gwin · Follow

Consultant @ \$5B Tech Co. | Published Forbes, Inc, LinkedIn · 9mo

I am going to be 26 years old. I always feel like I have wasted my early twenties because I have made some mistakes which I seriously regret. I had no goals in life and wasted hanging out with wrong people. What can I do about it?

I've made a career of failing. I didn't start succeeding until my late 30's. \* I applied to medical school at 22. Got rejected. \* I applied to MBA school at 23. Got rejected three times. \* Spent a year trying to get a job in Pharma sales (more)



5.4K 53 133



Mason Astbury · Follow

I drink, and I know things · Updated 1y

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Gandalf would have been worse because unlike Sauron, he knew the people's of Middle Earth, he's lived among each of them throughout his many years in Middle Earth and each of them trust and believe in him. Gandalf or Olorin [\(more\)](#)

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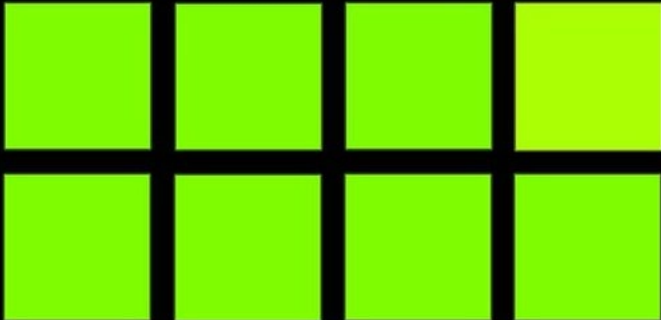
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Pure Concern · Follow

Answered by Scott Parikh · Updated Sep 14


Why is there a circular bridge in Uruguay?


The Laguna Garzón Bridge, Uruguay, was designed by architect Rafael Viñoly and has a unique design, unlike most bridges. It is circular. The reason for this design is quite simple. It was made that way to force drivers on the bridge to slow (more)






1.3K







6



53







Robert Surcouf · Follow

Studied Applied Mathematics & Computer Science at Polytechnic · Updated Aug 30


Is there a position to survive a free fall ending in the water?


Dives of less than 20 meters normally pose no major problem if performed in an upright position, feet together in front. At this height, good physical condition also allows classic diving, arms outstretched and head forward. Between 20 (more)






2.8K







63



95



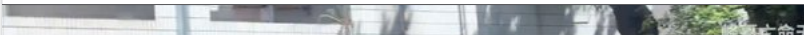


Milka Cheung · Follow

Lives in Beijing, China (2016–present) · Updated 1y


What do poor people in China eat?

A few days ago, I was surfing the Internet and there is a video that caught my eyes. It is a video that uploaded in bilibili and named Take a look at a restaurant for poor people living in Shenzhen. And then I found that people filmed th (more)



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