

```
int getRandomNumber()
{

return 4; // chosen by fair dice roll.

// guaranteed to be random.
}
```

https://xkcd.com/221/

## **PATTERNS**

## ENTROPY

## **ENTROPY**

```
int getRandomNumber()
{
    return 4; // chosen by fair dice roll.
    // guaranteed to be random.
}
```

- Bad entropy compromises keys
- Computers are very bad at making things up! (not always)
- Entropy therefore often is limited (esp. after booting!)
- Use what the API provides (<u>SecureRandom</u>)
- RTFM