

# Losing track of fractional cents (aka salami slicing)

```
class Payout(models.Model):  
    ...  
    amt = models.DecimalField(max_digits=20, decimal_places=2)  
  
Payout.objects.create(amt=100000/7)  
# saves: 14285.71 instead of 14285.714285714
```

Do this 10 million times and suddenly you've lost track of  $0.0043 * 10m = \$42,857$ .



I know you're tempted,  
don't even try it...  
salami slicers all  
get caught eventually

# float vs Decimal

```
>>> 0.1 + 0.2  
0.30000000000000004
```

Floating-point math introduces error that can accumulate.

```
>>> from decimal import Decimal  
>>> Decimal('0.1') + Decimal('0.2')  
Decimal('0.3')
```

Much better.