Monte Carlo Simulation

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Carvaggio, The Cardsharps

```
def rollDie():
    """returns a random int between 1 and 6"""
    return random.choice([1,2,3,4,5,6])

def checkPascal(numTrials, roll):
    yes = 0.0
    for i in range(numTrials):
        for j in range(24):
            d1 = roll()
            d2 = roll()
            if d1 == 6 and d2 == 6:
                yes += 1
                break
    print 'Probability of losing =',\
          1.0 - yes/numTrials
```

3

```
def rollLoadedDie():
    if random.random() < 1.0/5.5:
        return 6
    else:
        return random.choice([1,2,3,4,5])
```

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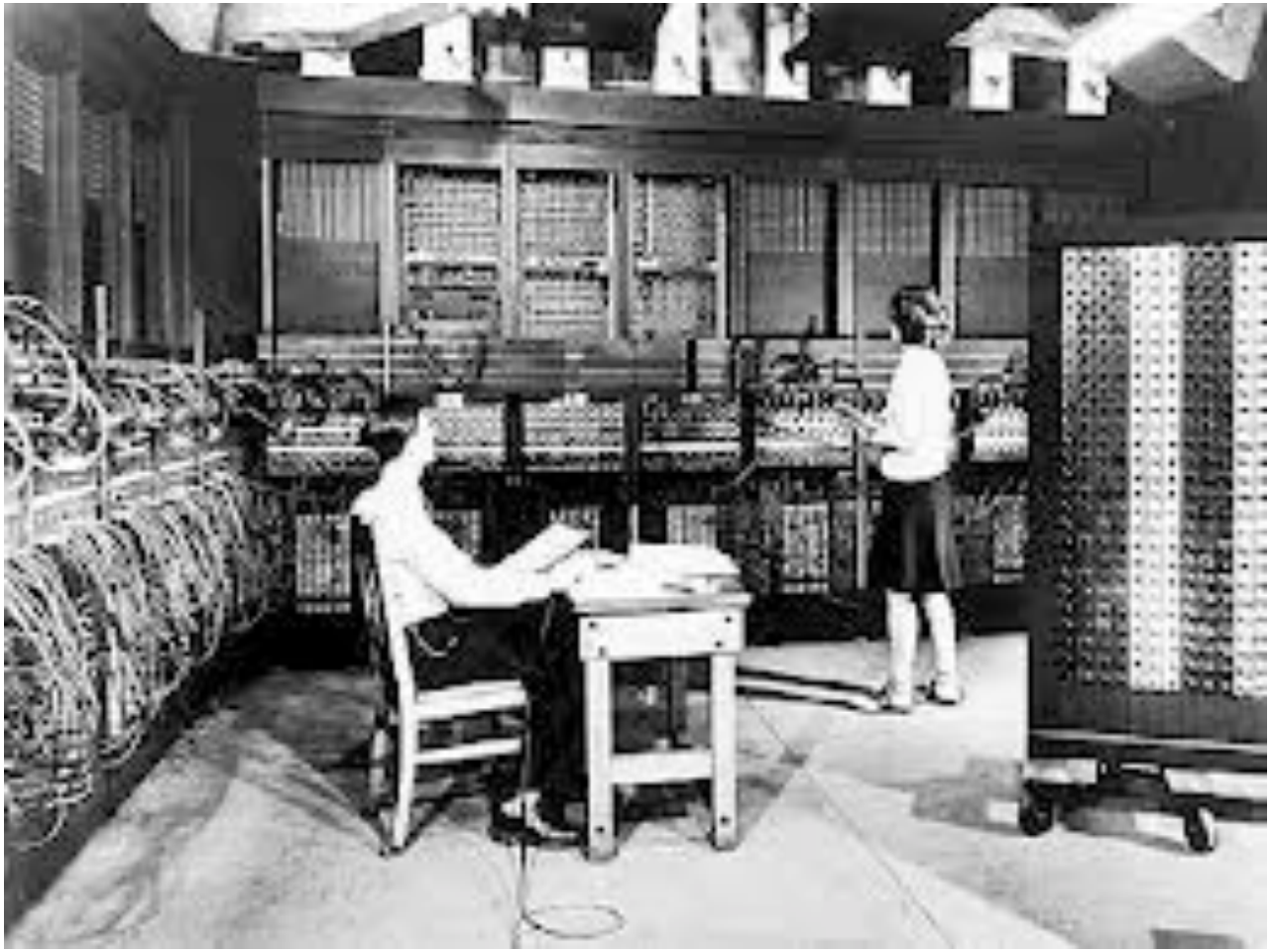
55/381

6.00x Simulation

6.00x

Monte Carlo Simulation

undo
01:23
New Game



6.00x

Monte Carlo Simulation

6.00x

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6.00x

Monte Carlo Simulation

ELIZABETH II
AUSTRALIA
2008

```
def flip(numFlips):
    heads = 0
    for i in range(numFlips):
        if random.random() < 0.5:
            heads += 1
    return heads/float(numFlips)
```