

**The Birthday Problem: with a certain number of people, what's the probability that two will have the same birthday? What's the least number of people needed so that this probability is greater than 50%?**

**Procedure: Run two loops, i and j. Loop i runs while the probability is less than 0.5. Loop j processes i people and returns the probability of two people having the same birthday.**

```
> x := 0:
> for i from 0 while x < 0.50 do
  x := 1:
  for j from 0 to i do
    x := evalf(x * (365-j)/365):
  end do:
  x := 1 - x:
end do:
> print (j):
```

**What about 75%? 90%? Simply change the 0.5 above to reflect different set probabilities.**