Just for Fun (Easy)

birds

Puzzle ID: birds

Ten birds sit on a clothes line. We shoot and kill one of them. How many birds remain on the clothes line?

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- one number: the number of birds that remain on the clothes line

bus

Puzzle ID: bus

A bus was travelling with less than 100 passengers. At stop A, exactly three quarters of the passengers got off and 7 passengers got on the bus. The same thing happened at next two stops, B and C. How many people got off at the stop C?

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- the number of people getting off at C

palindrome

Puzzle ID: palindrome

Suppose we write dates in the MMDDYYYY format. In this format, the 2nd of October 2001 is a palindrome (a string equal to its reverse): 10022001. Find the previous date that yields a palindrome in this format.

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- the 8-digit string

cube

Puzzle ID: cube

You have a cube NxNxN. How many straight cuts are necessary to cut it into N^3 cubes of size 1x1x1? You may arrange the pieces in any way you like before making each cut.

a) Solve for N=3

b) Solve for N=4

The answer for this puzzle consists of three lines, containing respectively:

- the ID of this puzzle

- the number of cuts from part a)

- the number of cuts from part b)

girl1

Puzzle ID: girl1

In a two-child family, one child is a boy. What is the probability that the other child is a girl?

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- the answer in the form a/b (where a,b are relatively prime)

girl2

Puzzle ID: girl2

In an unnamed overpopulated country the rulers agreed on a new law: Each woman may have as many children as she wants to, until she gives birth to a girl. After that, she may have no more children. Assume that the law will never be broken. All families will have as many children as they are (physically and legally) able to. On each birth either one boy or one girl is born with equal chances. In the current population the ratio males:females is 1:1. What will happen in the next 100 years?

- A) The ratio of males to females will go up
- B) The ratio of males to females will stay the same
- C) The ratio of males to females will go down

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- the uppercase letter corresponding to the correct answer

statements

Puzzle ID: statements

Given is a list with 2004 statements:

- 1. Exactly one statement on this list is false.
- 2. Exactly two statements on this list are false.
- 3. Exactly three statements on this list are false.

...

2004. Exactly 2004 statements on this list are false.

- a) Determine which statements are true.
- b) Replace "exactly" by "at least". Again, determine which statements are true.

The answer for this puzzle consists of three lines, containing respectively:

- the ID of this puzzle
- the encoded answer from part a)
- the encoded answer from part b)

How to encode the answer? If no statements are true, write the word 'NONE' (without the quotes). Otherwise take the set of true statements and write it as a set of ranges. E.g. the set

{1,2,3,7,9,100,101} is encoded as 1-3,7,9,100-101

letters

Puzzle ID: letters

How many letters does the _shortest_ correct answer to this puzzle contain?

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- your exact answer

century

Puzzle ID: century

The twentieth century ended on 31. 12. 2000, which was a Sunday. Looking into the future, on which days of the week won't any century ever end?

Remember that leap years are those divisible by 400 plus those divisible by 4 but not by 100. (1996 was a leap year, so was 2000, but 2100 won't be a leap year and neither will 2047.)

The answer for this puzzle consists of two lines, containing respectively:

- the ID of this puzzle
- the days of the week on which no century will ever end

The exact form of the answer is a comma-separated list of three-letter abbreviations of the days in the order in which they appear in a week. E.g. if the answer were Monday, Tuesday and Wednesday, write the string 'Mon,Tue,Wed' (without the quotes).

Input

There is no input for given problem.

Output

Output answers for each puzzle described below in the order they was described.

Example

Output: birds 100 bus 10000

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