ABSTRACT

The unary numeral system is the bijective base-1 numeral system. It is the simplest numeral system to represent natural numbers. Marks are typically clustered in groups of five for legibility. Addition (in the unary system) and subtraction are particularly simple in the unary system.

Done by

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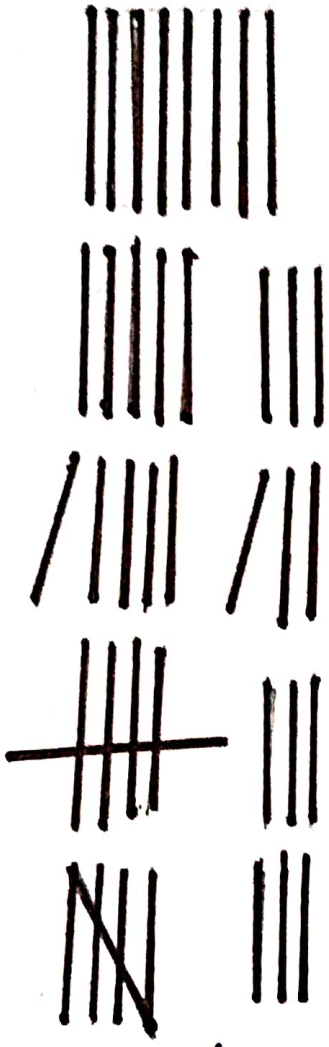
UNARY NUMERAL SYSTEM



Variations on the number eight in unary

The "unary numeral system" is the bijective base-1 numeral system. It is the simplest numeral system to represent natural numbers: in order to represent a number N, an arbitrarily chosen symbol representing 1 is repeated N times. For example, using the symbol '|' (a tally mark), the number 6 is represented as |||||| . The western standard method of counting on one's fingers is effectively a unary system as well as

Clustering:— Marks are typically clustered in group of five for legibility. This is similar to the practice of using "digit group separators such as spaces or commas in the decimal system. to make large numbers such as 100,000,000 easier to read. The first or fifth mark in each group may be written at an angle to the others for easier distinction. In the fourth example depicted above, the fifth stroke "closes out" a group of five, and is sometimes nicknamed the "herring bone" method of counting. In Brazil and France, a variation of this system is commonly used: similar to the "herring bone" method, four marks are arranged to form a square, with the fifth mark crossing the square diagonally instead of arranging "sticks" in linear fashion.

Another example of a unary counting system clustered in counts of five is

the chinese, Japanese and korean custom of writing the Chinese character, korean Hanja character, or Japanese kanji character 正 which takes 5 strokes to write, one stroke each time something is added.

Operations :-

Addition and subtraction are particularly simple in the unary system, as they involve little more than string concatenation. Multiplication and division are more cumbersome, however.

Comparison with other systems :-

There is no explicit symbol representing zero in unary as there is in other traditional bases, so unary is a bijective numeration system with a single digit. If there were a 'zero' symbol, unary would effectively be a binary system. In a true unary system there is no way to explicitly represent none of something, though simply making no marks represents it implicitly. Even in advanced tallying systems like Roman numerals there is no zero character, instead the Latin word for 'nothing' nullae is used.

Uses :-

In ancient mathematics :- For a real example of the unary system in ancient mathematics, see the Moscow Mathematical Papyrus, dating from circa 1800 BC.

In computer algorithms :- unary is used as part of some data compression algorithms; see Golomb coding for an example. Compared to standard positional numeral systems,

the unary system is impractical and is not used in practice for large calculations. It arises in some decision problem descriptions in theoretical computer science (e.g. some P-complete problems), where it is used to artificially decrease the run-time or space requirements of a problem. For instance, the problem of integer factorization is suspected to require more than a polynomial function of the length of the input as run-time if there the input is given in binary, but it only needs linear runtime if the input is presented in unary. But this is potentially misleading: using a unary input is slower for any given number, not faster. The distinction is that a binary (or larger base) input is proportional to the base 2 (or larger base) logarithm of the number while unary input is proportional to the number itself; so while the run-time and space requirement in unary looks better as function of the input size, it is a worse function of the number that the input represents.

CONCLUSION

This is unary numeral system. It is The simplest numeral system to represent natural numbers. Totally we like the project.

ABSTRACT

These project find the way it
[illegible] to find the destination by trying
[illegible] ways it developes integrated at
[illegible]

[illegible]

[illegible]

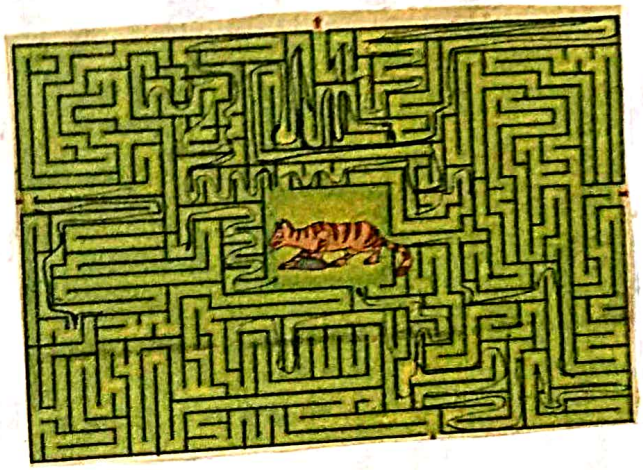
CSE - [illegible]

[illegible]

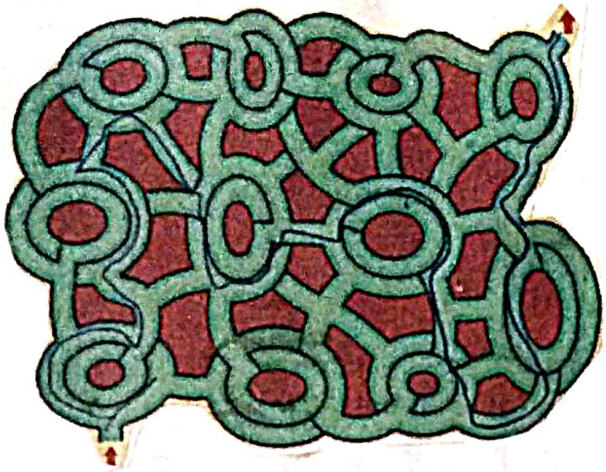
CSE - [illegible]

FINDTHEWAY

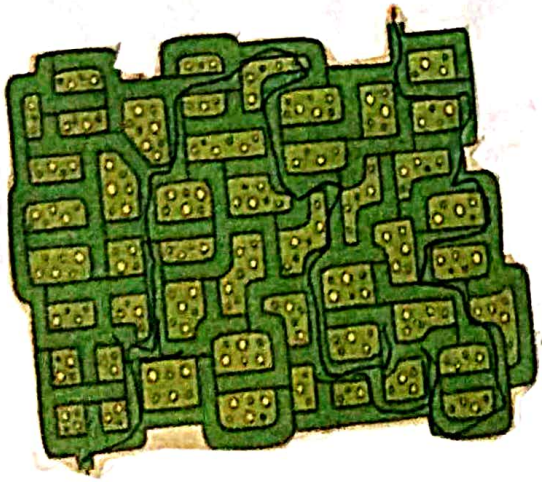
పింకి ఇరుక్కున్న ప్రమాదకరమైన వాగును దాటి
వెళ్ళే దారిని కనుక్కోండి



పిల్లి ఆహారం కోసం వెదుకుతూ లోపలికి వచ్చింది ఇరుక్కున్న నాలుగు దారుల్లో ఒకటి మాత్రమే బయటకు వెళ్తుంది. పిల్లి యాను ఏ దారి గుండా వచ్చిందో మళ్ళీ వెళ్ళాలని దారి చూపించగలా!



ఇక్కడ ఉన్న వృత్తంలో దారిని కనుక్కోండి



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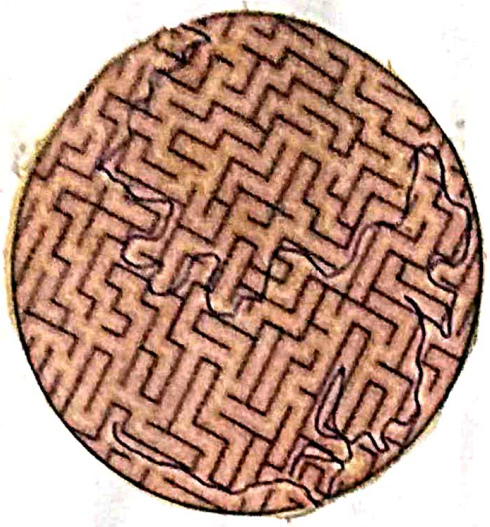

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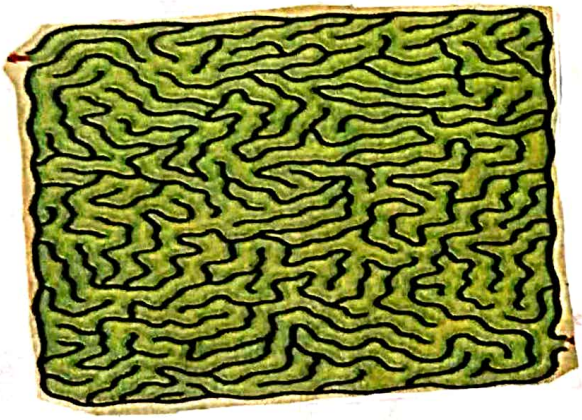

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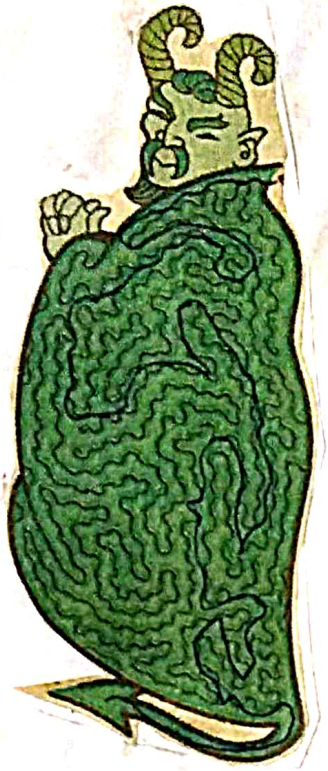

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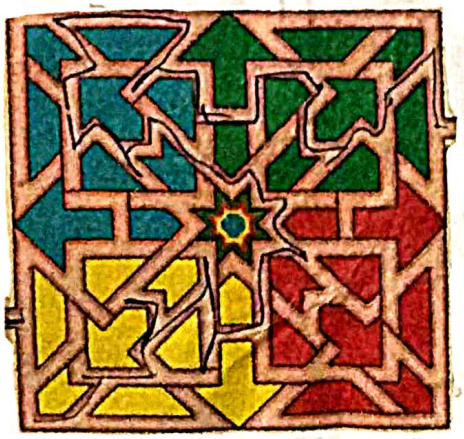

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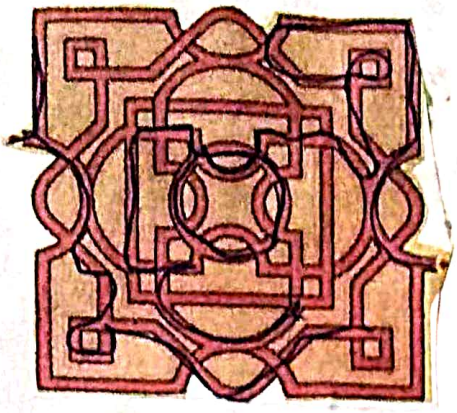

పైన వున్న ముగ్గులో దారిని కనుక్కోండి

ఇక్కడ ఉన్న బొమ్మలో దారిని కనుక్కోండి

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