



Is a prime number ?



XBITS

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The problem:

Create a python script, the script must have a function named isprime that checks whether the number enter by the user in standard input stream is a prime number or not.

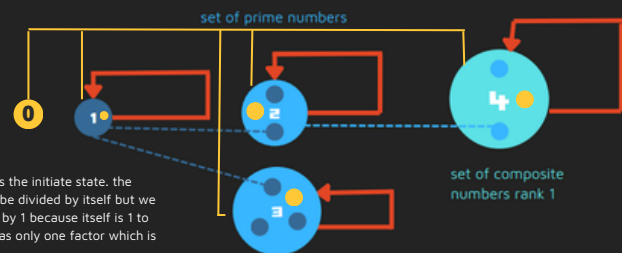
What's a prime number:

A number is prime if and only if it can be divided by it self or the number 1.
So it have at most only 2 factors.

We can clearly see that 1 is not a prime number because it is only divisible by 1 and itself (doesn't respect the criteria to be a prime) 2 is a prime number because it is only divisible by 1 and itself, where 4 is not a prime (composite) because it's made from a prime numbers This mean that the conception of 4 is made from 2 of numbers 2, this break the rule so 4 is divisible by itself, 1, and 2.

0 have infinite set of divisors, 0 can be used to compose all numbers hence any number composed by infinite set of 0's is the number it self. 0 can't be divided by it self. hence 0 is not prime

1 is not include because it's the initiate state. the number 1. is special it can be divided by itself but we can't say it can be divided by 1 because itself is 1 to hence it's not a prime. It has only one factor which is itself.



Example:

> Enter the number: 7
The number 7 is a prime number

Thanks and best wishes,

Sahraoui mohammed.

Ethical hacker and future security
researcher **incha allah.**

Sahraoui Mohammed