

Py4AIML

Assignment 01

Problem Statement 01

Write a function(s) to check if a given number is a strong number or not

** A strong number is a number in which the sum of the factorial of the digits is equal to the number itself.

Example:

145 since $1! + 4! + 5! = 1 + 24 + 120 = 145$

Name of function: isStrongnumber() which accepts an integer and returns True or False

1) isStrongnumber(145) then return True.

2) isStrongnumber(123) then return False.

Problem Statement 02

Write a function(s) to find all 3 digit Armstrong numbers

** An Armstrong number of three digits is an integer such that the sum of the cubes of its digits is equal to the number itself.

Example:

371 is an Armstrong number since $3^3 + 7^3 + 1^3 = 371$.

Problem Statement 03

Implement a function which returns True if the argument given is Prime number otherwise False

Example:

Name of function: isPrime() which accepts an integer and returns True or False

1) isPrime(11) then return True.

2) isPrime(4) then return False.

Problem Statement 04

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23.

Implement a function to find the sum of all the multiples of 3 or 5 below 1000

****Submission is not required. This is a Practice Assignment. The approach to these problem statements will be discussed in next session.**

Happy Programming!!