***Sys Net Project 3 algorithm document***

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Primality is tested in our program by passing the integer in question, x, to the primalityfunction isPrime. Our primality function returns x if x is prime, otherwise it returns 0. Our primality function works for all numbers greater than 0. The first two lines of code perform operations that checks if x is less than, or equal to 2, if latter of these two conditions are true than the function returns 0, the first returns x. The majority of the computational cost of the function resides in that iteration that determines if x is divisible by a number. The max number of iterations performed is equal to the square root of x*.* The Library functions called by our primality function, are sqrt, and fmod. Fmod is used to determine remainders, if at any point fmod is used and no remainder is found than x is not prime, and 0 is returned.

Pseudo Code for primality algorithm

int isPrime(int x){

if x equals 2

return x

if x is less than 2 or is a even number

return 0

for every odd number , y that is greater than 2 and <= sqrt(x)

if x is divisible by y

return x

}