

## *Finding Primes*

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*September 24, 2015*

This is the project that I do to differentiate primes and compositions. The reason why I do this is because sometimes it is so hard to distinguish a number that it is prime or composition. For instance, can you find out 230000000000345676857464587 is prime or composition without using computer?



Figure 1: Scientist are coding in the lab couple of years ago.

### PYTHON CODE

```
a=3
b="prime"

for x in range(2,a):
    if a%x==0:
        b="composite"

print "this number is " + b

a=21
b="prime"

for x in range(2,a/2):
    if a%x==0:
        b="composite"
        break

print "the number is "+b
```

- First, I set "a" equals to three.
- Set "b" as prime.
- Then, I set the range from 2 to "a".
- If a can be divided by x and leave 0 remainder. After that, I print out if "a" is prime or composition.
- After that is the 2nd method which is faster for your computer to run

```
this number is prime
the number is composite
```

If the program is right, you should get this result.

## REFERENCES