Abstract. In this paper we will use a simple Logo software to demonstrate a possible pattern in prime numbers. We will see how primes show a tendency to retrace the path of other primes.

Keywords: Prime numbers, Composite numbers, logo, patterns, real numbers.

1. Introduction
Prime numbers are such numbers which show no pattern & are distribute unevenly in the number line. We will show how primes may serve and have a possible pattern. To do so I have used a simple logo software available on Android. I have used Turtle Draw version 2.0.16 to draw the pattern. Logo is a software used to draw a particular shape using simple commands like FORWARD, RIGHT, LEFT etc. A numerical value is specified after the command to indicate the magnitude. For e.g. FORWARD 10 Will shift the turtle
by 10 units and the turtle will trace a path behind it. Similarly Right 90 indicates that turtle has to turn right by 90 degree.

2. The procedure

To Start with we will use the Set of Natural numbers \( \{N\} \). we Beign by number 1. As 1 is special we specify no action on it. Then as 2 is Prime we command the turtle to go forward by 90 units. Then as 2 is prime we specify One special action as to turn Right.

In genral If a number \( \alpha \neq 1 \) is composite then the only action is FORWARD 90. If \( \alpha \) is prime then We specify two actions Forward 90 and RIGHT 90. The computation for first 50 natural numbers Is as follows:
Since I type command manually I could do this up to 151. It would be fun to see what happens when consider more and more numbers.

For numbers till 100 this is what we get-
For numbers till 151 this is what we get: We see that How The next primes overlap over certain primes and rotate And Continue to trace a previous path.
There also seems to be a tendency of primes to build squares of $2 \times 2$. Still there are a few questions unanswered. If we consider to interchange the commands i.e. to perform a turn towards right is given to consecutive numbers then we get the following:

This is pretty Amazing to see such patterns When a change of command is done. We see lots of $2 \times 2$ boxes and a very nice symmetry. This is for the first 50 digits.
3. Conclusion

I happen to make no guaranteed conclusions or predictive thoughts on the following patterns a more intense mathematical investigation is indeed needed.
Thank you to read. For any further info please contact me my email is: surajpdeshmukh312[at]gmail[dot]com