Abstract

The increasing prominence of computers has led to a new way of viewing nature as a form of computation. The Modern generation is more enthusiastic to know about the dynamical behavior of non-linear system. It is an in-depth study which is speculative and thought provoking. This paper highlights the importance of cellular Automata in short application of non-linear dynamics. Cellular Automata has been used in a variety of applications viz. modeling traffic, modeling chemical reactions, cryptography etc. This paper has been designed to be a descriptive version of non-linear dynamics system to get brief view of the cellular Automata and its application to shell coat pattern within the mathematical work by means of a computer programming.

References

- J. D. Murray(2003), Mathematical Biology (Springer-Verlag, Berlin).
- J. von Neumann, The Theory of Self-reproducing Automata. Illinois,

**Index Terms**

Computer Science  Bio-medical Sciences

**Keywords**

Cellular Automata  coat pattern  discrete dynamical system  non-linear