1. What is computation?

* **computation *is the movement ,and perhaps alteration during transit, of data***

1. Write about Automation?

* **Automation is the use of technology to perform tasks with where human input is minimized.**

1. Write about Intelligent Automation?

* **The most advanced level of automation is intelligent automation**

1. Define Theory of Computation?

* **The Theory of Computation is basically about using algorithms to solve problems in computer science and math.**

1. What are the sets?

* **Sets are collection of things that are grouped together based on a common property**

1. What is combination of set?

* **The combination of a set refers to the different ways in which the elements of the set can be grouped or chosen without considering the order**

1. Explain cartesian product?

* **The set of all ordered pairs where the first element of the pair is from the first set and the second element is from the second set**

1. What is Transition function? where is it used?

* **a transition function determines the next configuration of an automaton based on the current state and input symbol**

1. What is the major objective of automata theory?

* **is to develop methods by which computer scientists can describe and analyze the dynamic behavior of discrete systems, in which signals are sampled periodically.**

1. Explain Finite State Machine?

* **is a term used by programmers, mathematicians, engineers and other professionals to describe a mathematical model for any system that has a limited number of conditional states of being**

1. List the 3 conditions of Linear boarded automation?

* **Turing Machine with Non-deterministic logic,**
* **Turing Machine with Multi-track, and**
* **Turing Machine with a bounded finite length of the tape.**

1. Write about Turing Machine?

* **first described by Alan Turing in Turing 1936–7, are simple abstract computational devices intended to help investigate the extent and limitations of what can be computed**

1. How does the string contamination is done?
2. What is substring? Give an example?

* **a substring is a contiguous sequence of**[**characters**](https://en.wikipedia.org/wiki/Character_(computing))**within a**[**string**](https://en.wikipedia.org/wiki/String_(computer_science))
* **example : Take the string 472828. Then ∧, 282, 4, and 472828 are all substrings of 472828.**
* **48 is not a substring of 472828.**

1. Write about Interpretation Function?

* **maps the structure to the elements of the problem domain in a systematic fashion so as to preserve the structural relationships between significant elements of both the device and the problem the domain**

1. Write about ENIAC Computing device?

* **The first widely used electronic computer was the Electronic Numerical Integrator and Computer (ENIAC), developed in the mid-1940s by John Mauchly and J. Presper Eckert**