**Algorithm Notes**

* **What is an Algorithm ?**
* An algorithm is used to solve problems that require instructions which perform specific tasks which need to be given rules and instructions for calculations, data processing or automated reasoning which is all done with the help of softwares as well as hardwares in a computer.
* **Flow Chart -**
* Flowcharts are used in analyzing, designing, documenting or managing a process or program in various fields.
* **Symbols of a Flow Chart -**
* Data
* Process
* Decision
* Document
* Start/End
* Direct Data
* Stored Data
* Manual Input
* Internal Storage
* Predefined Process
* Sequential Access Storage
* **Software development Life Cycle -**
* SDLC Is a process that follows the software project.
* It describes the development, maintenance, replacing and altering or enhancing specific software.
* It the life cycle the shows how to improve the quality of the software.
* **The steps in a software development life cycle are -**
* Initialisation
* Requirements
* Analysis
* Design
* Implementing
* Testing
* Coding
* Acceptance
* **Importance of Algorithm Design -**
* It is used to store and access large quantities of data efficiently.
* It is used to solve complex computational problems and to design of good programs.
* It is important to justify an algorithm correctness mathematically.
* It provides clear, simple and unambiguous description.