

## DEVOPS ASSIGNMENT 1:

### A).What is Software?

1. Software also abbreviated as SW or S/W is a set of instructions that enable the user to interact with the computer, its hardware and perform certain tasks.
2. Basically, what software does is instruct all the devices on the entire computer system what to do and how to perform a particular task.
3. Hence, a software acts as a mediator between the user and the computer and the user will not be able to perform any tasks in the absence of a software.
4. The types of software : System Software , Application Softwares and Programming Softwares.
5. System Software interact with the hardware at a very basic level and are designed to work on the processing capabilities of the computer itself.
6. System softwares are of 4 types: OS, DEvice Drivers, Firmware,Utility.
7. Application Software may consist of a single program or a collection of programs which work together to accomplish a task.
8. Programs and softwares are created by coders using different tools called programming tools.
9. Examples of Programming softwares: Compilers, Debuggers,Linkers
10. Hence, Software serves the purpose of executing commands provided by the user and these commands are called inputs.

### B). SaaS :

SaaS also known as software as a service or On-Demand Softwares a distribution model in which services are hosted by cloud service provider. These services are available to the end user over the internet so, the end users do not need to install any software on their devices to access these services.

### C). PaaS:

Platform as a service (PaaS) is a complete development and deployment environment in the cloud, with resources that enable you to deliver everything from simple cloud-based apps to sophisticated, cloud-enabled enterprise applications. You purchase the resources you need from a cloud service provider on a pay-as-you-go basis and access them over a secure Internet connection.

D). IaaS: In a typical IaaS model, a business—which can be of any size—consumes services like compute, storage, and databases from a cloud provider. The cloud provider offers those services by hosting hardware and software in the cloud. The business no longer needs to purchase and manage its own equipment, or space to host the equipment, and the cost shifts to a pay-as-you-go model. When the business needs less, it pays for less. And as it grows, it can provision additional computing resources and other technologies in minutes

### E).IaaS :

Infrastructure as code is the process of managing and provisioning computer data centers through machine-readable definition files, rather than physical hardware configuration or interactive configuration tools. Infrastructure as code (IaC) means to manage your IT infrastructure using configuration files. Infrastructure as code, also referred to as IaC, is an IT practice that codifies and manages underlying IT infrastructure as software. The purpose of infrastructure as code is to enable developers or operations teams to automatically manage, monitor and provision resources, rather than manually configure discrete hardware devices and operating systems. Infrastructure as code is sometimes referred to as programmable or software-defined infrastructure.