Assignment-1-DevOps

Name- Kuwar Kanchan Dilip
Roll_no-21111029
Class- MSc B21

What is SaaS-

The long form of SaaS is "Software as a service".Basically It is a method of Software delivery in which a device having an internet connection and Web browser can easily access the provided software.User accesses the software products via the internet rather than downloading and installing the application.It is software offered by the provider on the web. Customers can access and use the software, mostly through a web browser, while the provider manages the infrastructure and security.

Some benefits of SAAS-

1] Lower cost of setup installation and infrastructure.

2] A person can access the service from any location.

3] There will be a surety that the software will be available for use, whenever needed.

Examples of SAAS- Dropbox, Salesforce, Google Workspace , etc.

What is PaaS-

The long form of PaaS is "Platform as a Service". PaaS is a model for providing clients with an IT infrastructure and a platform for developing cloud applications using cloud computing.In PaaS ,Provider delivers hardware and software tools the users over internet.PaaS is a set of services aimed at developers that helps them develop and test apps without having to worry about the underlying infrastructure. Developers don't want to have to worry about provisioning the servers, storage and backup associated with developing and launching an app. They want to write code, test the app, launch the app, and be able to continually make changes to it to fix bugs. All the back-end stuff about setting up servers should be done automatically and transparently in the background.And that all is handled by a PaaS provider.For app designers and developers, PaaS means that you have an

integrated development and deployment environment at your fingertips, often including sophisticated software frameworks that also speed your work.
Examples of PaaS- AWS, Heroku, Windows Azure, etc.

What is IaaS-

The long form of IaaS is "Infrastructure as a Service".IaaS (Infrastructure-as-a-Service) basically means that you don't have to care about hardware. It is a ground floor for any cloud. It allows you to forget about particular hardware and only specify 1) number of CPU cores 2) number of GB of RAM 3) number of GB of disk space. It may also allow to perform some configuration of network interfaces.IaaS allows to install a guest operating system to a virtual server and access this operating system remotely.In this service,The vendor hosts the infrastructure in various data centers. Their customers access this cloud infrastructure over the Internet. In this service model a service is provided in terms of computing resources.Storage,network,virtualization is provided through IaaS.
Examples of IaaS-Microsoft Azure,Almost any VPS hosting.

What is IaaC-

The long form of IaaC is,"Infrastructure as a code".It means managing your IT infrastructure using configuration files.
Historically managing infrastructure is a manual process.people will have to physically put servers and configure them.but through IaaC configuration files are created that contain your infrastructure specifications, which makes it easier to edit and distribute configurations.
examples of IaaC tools are-chef, Puppet, Red hat ansible, etc.

What is Software-

Software is nothing but the set of instructions,programs written to perform specific tasks. It can be a program used to operate a computer and execute operations.In simple terms software tells computer to how to function.A software or computer software is a type of programs which enable the users to perform some particular specific task to operate the computer.It essentially directs all of the peripheral devices on the entire computer system- what exactly to do and how exactly to perform a task.I will give direction to all peripheral devices to perform that task.It

plays role as a mediator between user and hardware.If we classify the software,There are 2 types of softwares-

1]System Software-These are nothing but programs written in low-level languages, which interact with the hardware at a very basic level. System software serves as the interface between the hardware and the end users.
ex- Operating system,drivers

2]Application Software- These softwares are designed to satisfy a particular need of a specific system.
ex- MS-Paint,Railway reservation system,etc.
