

- A paragraph on what PaaS, SaaS and IaaS are and the differences between them.**  
 SaaS(Software as a Service) is a cloud computing technology that is primarily focused at the end-user when we are running an application installed on the computer, we actually access the application remotely. Example: Website, Gmail, Google docs.  
 PaaS(Platform as a Service) are primarily of interest to application developers who want to be focus on their code and not the underlying infrastructure/server runtimes keeping web up to date, all of that are taken care of you by PaaS hosting provider. Example: Google App Engine, Adobe commerce  
 IaaS(Infrastructure as a Service) is providing the computing resources over the internet. With IaaS, a third party posts infrastructure components that are traditionally found in on premise data centers in a pay-as-you-go model. Example: Amazon EC2
- A paragraph on the differences between ETL and ELT. Also, list the pros and cons of each in a chart. And specify when you'll use which.**  
 ETL(Extract, Transform, Load): In this model, It first extract the data from a source system and then followed immediately by applying transformations, then we load the transform data into a final tables.

Advantage	Disadvantage
Requires less physical space to store data	Less flexibility, cost more to maintain
Help with data privacy and compliance	Time-to-insight is relatively long
Cleansing sensitive data before loading into the data destination	More difficult to debug and fix errors

ELT(Extract, Load, Transform): In this model, It first extract the data, instead of landing it in a temporary staging area, the data going to get loaded into a more permanent location, the transformation are applied to this dataset.

Advantage	Disadvantage
Flexibility and ease of storing new, unstructured data.	Requires more physical space to store data
Error are easier to fix	More system resources required
Entire process can be easily audited	May be slower due to additional writes.