OSI Model :-

1. Physical Layer :- Physical Layer used transfer bit stream over wire3

2. Data Link Layer : Defines the format of data on the network

3. Network Layer :- Decides which physical path the data will take

4. Transport Layer :- Transmit data using transmission protocols including TCP & UDP

5. Session Layer :- Maintains connections and is responsible for controlling ports and sessions

6. Presentation Layer :- Ensures that data is in usable format and is where data encryption occurs

7. Application Layer :- Human-computer interaction layer, where applications can access the network services

Commands for hosting your apache web page in linux :-   
sudo su

yum update –y

yum install httpd

systemctl start httpd

httpd (status check)

systemctl enable httpd

echo “put your own text” > /var/www/html/index.html

IAAS (Infrastructure as a Service)

**(taken care by client)**

**(Application)**

**(Application Runtime)**

**(OS)**

**This is taken care by cloud provider**

(virtualization)  
(Physical Hardware)  
(NETWORKING)

PAAS (Platform as a service)

**(Application)**

**All the below services are take care by cloud provider**

(Application Runtime)

(OS)

(virtualization)  
(Physical Hardware)  
(NETWORKING)

* Elastic load balancer :- Distribute incoming traffic across multiple targets

🡪 Amazon RDS – Relational databases – MySQL, Oracle, SQL Server

Three types of ELB :-   
  
1. Classic Load Balancer :-  
  
Old generation type :- (TCP / TLS)

(Not recommended)

2. Application Load Balancer   
- New generation type :- Http/https

3. Network Load Balancer   
- New Gen type :- TCP & TLS & UDP

- Very high performance

Availability Downtime   
99.95% 22 minutes

99.99% 4 and ½ minutes

99.999 26 seconds