**Load Balancer:**

* It will distribute the traffic equally among all the servers.
* Load balancers developed based on OSI(open systems interconnection) model.

**Types of Load Balancers:**

* **Application load balancer**
* **Network load balancer**
* **Gateway load balancer**
* **Classic load balancer(which is not in use)**

**Application load balancer:**

* It will operates on layer 7(application layer) of osi model.
* It will supports http and https traffic.
* In which we can access the application by using DNS.
* It provides path routing.

**Network load balancer:**

* It will operates on layer 4(transport layer) of osi model.
* It supports TCP protocal.
* It will handle millions of requests per second.
* In which we can access the application via static i.p.

**Gateway load balancer:**

* It will be used whenever application needs high security.
* It will operates on layer 3 of osi model.

**Classic load balancer:**

* It will operates on layer 4 and layer 7 of osi model.
* It will used whenever the existing application is running on classic ec2 instance.

**Steps to create Load balancer and send the traffic to multiple servers:**

* Create two or more ec2 instances before creating the target group.
* First we need to create target group before creating load balancer for that go to EC2 dashboard and click on target group or create the target group while creating the load balancer.
* While creating the target group we need to register the instances (which instances are will receive the request or load balancer send the traffic).
* Go to EC2 dashboard and click on load balancer.
* Select the type of load balancer in which I have selected application load balancer.
* Enter the name of load balancer whatever we want.
* Select the scheme either internet-facing or internal.Internet -facing is for public and internal is for private.
* Select load balancer i.p address type.
* Select the VPC and two availability zones(create two subnets in two different availability zone).
* Select the security group and target group whatever we have created earlier.
* Click on create load balancer.
* After creating ec2 instances we need to edit the inbound rules in which add the http port no.80 protocol.
* Connect to ec2 instances using putty and install nginx or anything.
* By using load balancer DNS name we can access the application on browser.