VPC = virtual private cloud

Steps :

1. Create a VPC called Flipcart-VPC with CIDR 192.0.0.0/16
2. Create 2 subnets - Flipcart-Public and Flipcart-Private 192.0.20.0/24 192.0.30.0/24
3. Select the Flipcat-Public subnet --> Subnet Actions --> Modify Autoassign IP settings -->Enable auto-assign public -->Save
4. Create an INTERNET GATEWAY (IGW) --> 1 VPC can have only 1 IGW without which it can't connect to INTERNET.

Flipcart-IGW --> create --> Attach it to Flipcart-VPC

1. Create a ROUTE in the ROUTING TABLE :: once we create a VPC, automatically a route table is created which has a LOCAL ROUTE by default.

Now, to reach out to INTERNET, it should be reaching out to the IGW. select the ROUTING TABLE --> select ROUTES tab --> Edit --> Add

another ROUTE

DESTINATION LOCAL

0.0.0.0/0 select the IGW here

Select the SUBNET ASSOCIATIONS TAB--> Edit->Select the Flipcart- Public subnet --> SAVE

1. LAUNCH an EC2 instance within the PUBLIC subnet of Flipcart-VPC. The instance should be launched with a PUBLIC and PRIVATE ip.

LAUNCH another EC2 instance within the Flipcart-Private subnet. The instance should get only PRIVATE ip.

1. Create a NAT gateway. NAT gateway has to be within the PUBLIC SUBNET and it should have an EIP (Elastic IP address)

Create a ROUTE table Flipcart-NAT --> Attach it to the Flipcart-VPC Create a NEW Route to point to the NAT Gateway

Select Subnet Associations Tab ----> Select Private subnet

Now we should be able to reach out to internet from the instance having private IP.

**VPC PEERING**

* 1. Create a second VPC called CBNITS-VPC with CIDR 10.0.0.0/16
  2. Create a Subnet called CBNITS-Subnet with CIDR 10.0.20.0/24
  3. Create an IGW called CBNITS-IGW and attach it to CBNITS-VPC
  4. Add a new route which will point to CBNITS-IGW
  5. Launch an instance within CBNITS-VPC
  6. While both of the instances [ One in Flipcart-VPC and another in CBNITS-

VPC ] are running, ssh to the first

instance and ping the Public IP of the 2nd instance...it pings but we can't ping the Private IP of the

same instance.

* 1. To achieve this, we need to configure VPC PEERING [ this is for communication between instances of

[ CROSS-VPC ].

* 1. Create corresponding routes in the Routing tables of both of the VPCs.