

## EXTRA 5:

- > create a vpc with cidr block
- > create a subnet and assigning the auto ipv4
- > create internet gateway
- > creating a route table and associating route table with gateway
- > associating the route table with subnet id
- > launching the instance in the subnet id

```
provider "aws" {
```

```
  region = "ap-south-1"
```

```
  profile = "myvishesh"
```

```
}
```

```
resource "aws_vpc" "hw" {
```

```
  cidr_block = "192.168.0.0/16"
```

```
  instance_tenancy = "default"
```

```
  tags = {
```

```
    Name = "hw"
```

```
  }
```

```
}
```

Coronavirus x AWS: aws x vpcs | VPC x multi hybrid x EXTRA 5 x 9th July 2020 x AWS: aws x EC2 Manag x Coronavirus x

ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#vpcs:sort=VpcId

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New VPC Experience Tell us what you think

Create VPC Actions

Filter by tags and attributes or search by keyword

| Name | VPC ID                | State     | IPv4 CIDR      | IPv6 CIDR | DHCP options set | Main Route table |
|------|-----------------------|-----------|----------------|-----------|------------------|------------------|
| hw   | vpc-044571bb3f8019568 | available | 192.168.0.0/16 | -         | dopt-57758d3c    | rtb-0c0702f68a2  |
|      | vpc-15f8e57d          | available | 172.31.0.0/16  | -         | dopt-57758d3c    | rtb-2c6dbe47     |

1 to 2 of 2

Description CIDR Blocks Flow Logs Tags

VPC ID vpc-044571bb3f8019568 Tenancy default

State available Default VPC No

IPv4 CIDR 192.168.0.0/16 IPv6 CIDR -

IPv6 Pool - DNS resolution Enabled

Network ACL acl-0f94e5c317141c41a DNS hostnames Disabled

DHCP options set dopt-57758d3c Route table rtb-0c0702f68a21397a5

Owner 410914255776

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ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#vpcs:sort=VpcId

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New VPC Experience Tell us what you think

Create VPC Actions

Filter by tags and attributes or search by keyword

| Name | VPC ID                | State     | IPv4 CIDR      | IPv6 CIDR | DHCP options set | Main Route table |
|------|-----------------------|-----------|----------------|-----------|------------------|------------------|
| hw   | vpc-044571bb3f8019568 | available | 192.168.0.0/16 | -         | dopt-57758d3c    | rtb-0c0702f68a2  |
|      | vpc-15f8e57d          | available | 172.31.0.0/16  | -         | dopt-57758d3c    | rtb-2c6dbe47     |

1 to 2 of 2

CIDR Status Status reason

192.168.0.0/16 associated -

IPv6 CIDR Blocks:

| CIDR | IPv6 Pool | Status | Status reason |
|------|-----------|--------|---------------|
|------|-----------|--------|---------------|

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```
resource "aws_subnet" "hw_subnet" {
  vpc_id   = "${aws_vpc.hw.id}"
  cidr_block = "192.168.0.0/16"
  availability_zone = "ap-south-1a"
  map_public_ip_on_launch = true
}
```

Coronavir... AWS: aws... Subnets | V... multi hybr... EXTRA 5... 9th July 20... AWS: aws... EC2 Manag... Coronavir... + -

ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#subnets:sort=AvailabilityZone

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New VPC Experience Tell us what you think

VPC Dashboard New

Filter by VPC:

q vpc-04457...

vpc-044571bb3f8019568  
hw  
Owner: 410914255776

VIRTUAL PRIVATE CLOUD

Your VPCs

Subnets

Route Tables

Internet Gateways New

Egress Only Internet Gateways New

DHCP Options Sets New

Elastic IPs New

Managed Prefix

Create subnet Actions

Filter by tags and attributes or search by keyword

1 to 1 of 1

| Name | Subnet ID                | State     | VPC                        | IPv4 CIDR      | Available IP | IPv6 CIDR | Availability Zone |
|------|--------------------------|-----------|----------------------------|----------------|--------------|-----------|-------------------|
|      | subnet-04399fcd339abc6a1 | available | vpc-044571bb3f8019568  ... | 192.168.0.0/16 | 65530        | -         | ap-south-1a       |

Subnet: subnet-04399fcd339abc6a1

Description Flow Logs Route Table Network ACL Tags Sharing

|                          |                            |                |                                       |
|--------------------------|----------------------------|----------------|---------------------------------------|
| Subnet ID                | subnet-04399fcd339abc6a1   | State          | available                             |
| VPC                      | vpc-044571bb3f8019568   hw | IPv4 CIDR      | 192.168.0.0/16                        |
| Available IPv4 Addresses | 65530                      | IPv6 CIDR      | -                                     |
| Availability Zone        | ap-south-1a (aps1-az1)     | Route Table    | rtb-0f6222884d317ad9   hw_route_table |
| Network ACL              | acl-0f94e5c317141c41a      | Default subnet | No                                    |

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Coronavir... AWS: aws... Modify aut... multi hybr... EXTRA 5... 9th July 20... AWS: aws... EC2 Manag... Coronavir... + -

ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#ModifyAutoAssignIpSettings:SubnetId=subnet-04399fcd339abc6a1

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Subnets > Modify auto-assign IP settings

## Modify auto-assign IP settings

Enable the auto-assign IP address setting to automatically request a public IPv4 or IPv6 address for an instance launched in this subnet. You can override the auto-assign IP settings for an instance at launch time.

Subnet ID subnet-04399fcd339abc6a1

Auto-assign IPv4 ☒ Enable auto-assign public IPv4 address ⓘ

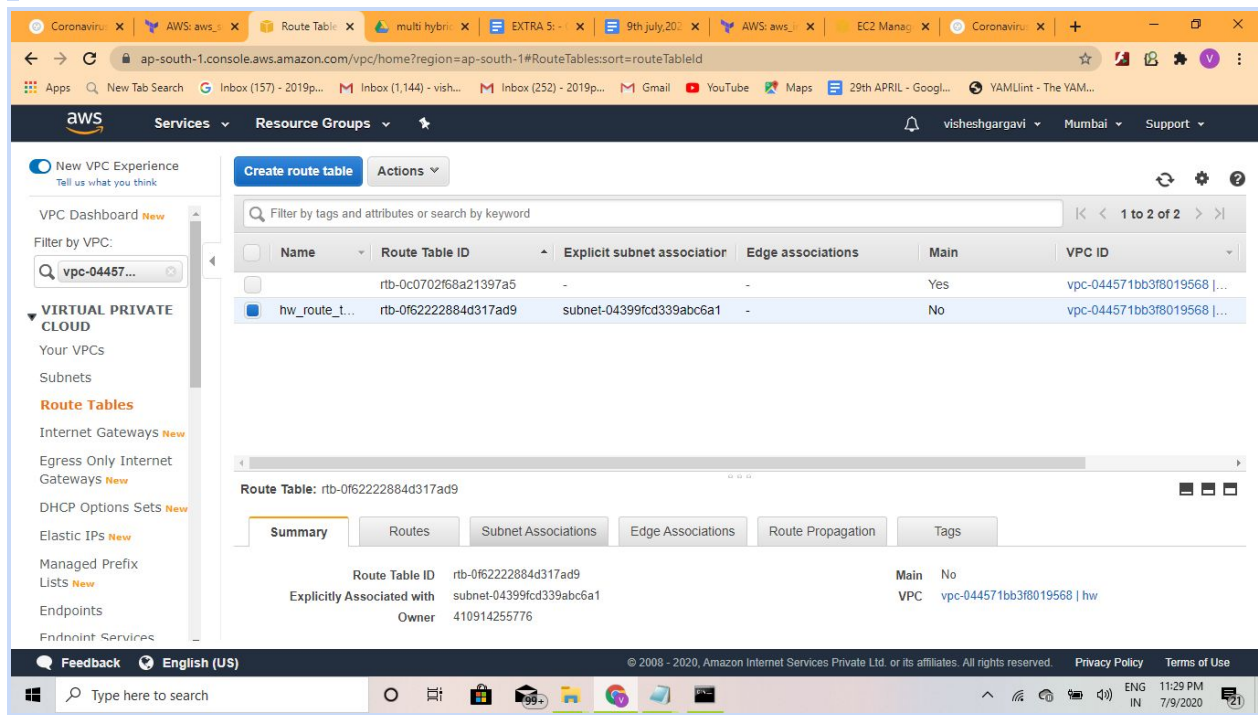
\* Required Cancel Save

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```
resource "aws_internet_gateway" "hw_internet_gateway" {
  vpc_id = "${aws_vpc.hw.id}"
```

```
tags = {
  Name = "hw_internet_gateway"
}
```



```
resource "aws_route_table" "hw_route_table" {
  vpc_id = "${aws_vpc.hw.id}"
```

```
  route {
    cidr_block = "0.0.0.0/0"
    gateway_id = "${aws_internet_gateway.hw_internet_gateway.id}"
  }
```

```
  tags = {
    Name = "hw_route_table"
  }
}
```

```
resource "aws_route_table_association" "a" {
  subnet_id = aws_subnet.hw_subnet.id
  route_table_id = "${aws_route_table.hw_route_table.id}"
}
```

ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#RouteTables:sort=routeTableId

Filter by tags and attributes or search by keyword

| Name          | Route Table ID        | Explicit subnet association | Edge associations | Main | VPC ID                      |
|---------------|-----------------------|-----------------------------|-------------------|------|-----------------------------|
|               | rtb-0c0702f68a21397a5 | -                           | -                 | Yes  | vpc-044571bb3f8019568   ... |
| hw_route_t... | rtb-0f62222884d317ad9 | subnet-04399fcd339abc6a1    | -                 | No   | vpc-044571bb3f8019568   ... |

View: All routes

| Destination    | Target                | Status | Propagated |
|----------------|-----------------------|--------|------------|
| 192.168.0.0/16 | local                 | active | No         |
| 0.0.0.0/0      | lgw-01cd796d884da2551 | active | No         |

ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#RouteTables:sort=routeTableId

Filter by tags and attributes or search by keyword

| Name          | Route Table ID        | Explicit subnet association | Edge associations | Main | VPC ID                      |
|---------------|-----------------------|-----------------------------|-------------------|------|-----------------------------|
|               | rtb-0c0702f68a21397a5 | -                           | -                 | Yes  | vpc-044571bb3f8019568   ... |
| hw_route_t... | rtb-0f62222884d317ad9 | subnet-04399fcd339abc6a1    | -                 | No   | vpc-044571bb3f8019568   ... |

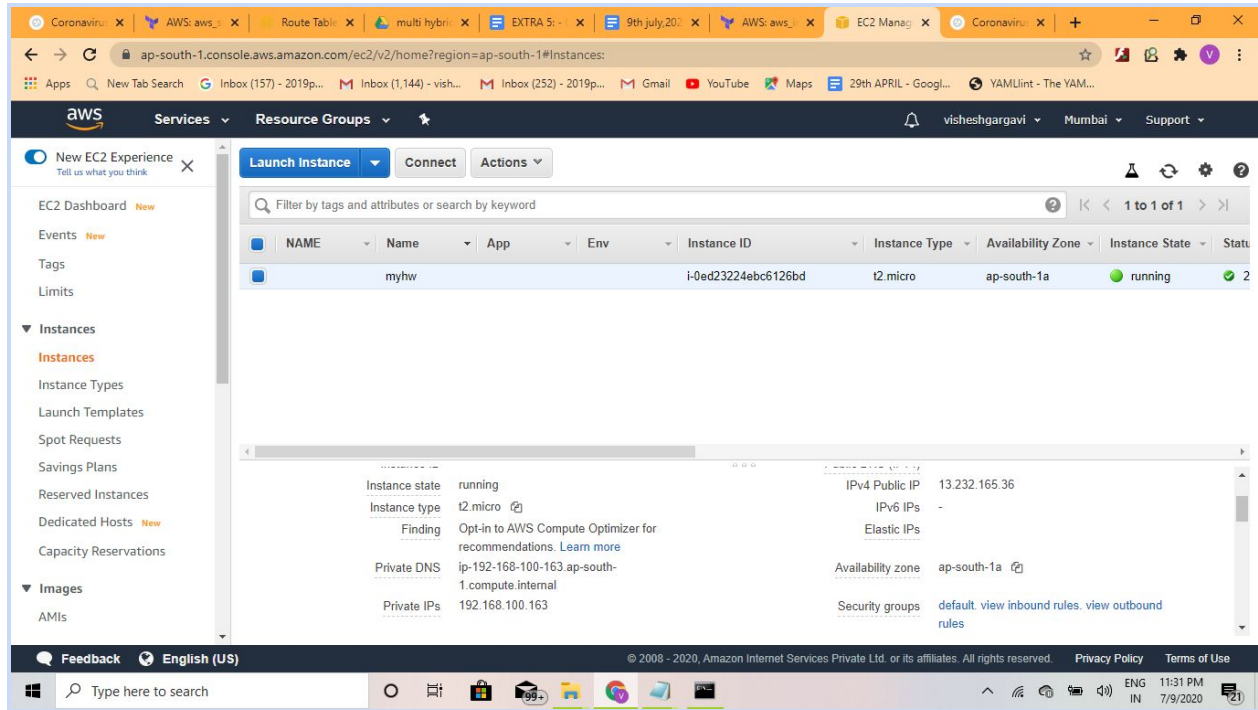
Subnet Associations

| Subnet ID                | IPv4 CIDR      | IPv6 CIDR |
|--------------------------|----------------|-----------|
| subnet-04399fcd339abc6a1 | 192.168.0.0/16 | -         |

```
resource "aws_instance" "myhw" {
  ami      = "ami-08706cb5f68222d09"
  instance_type = "t2.micro"
  key_name  = "mykey1111.pem"
  availability_zone = "ap-south-1a"
  subnet_id = "${aws_subnet.hw_subnet.id}"
}
```



```
tags = {
  Name = "myhw"
}
```



C:\Users\user\Desktop\cloud>ssh -i mykey1111.pem -l ec2-user 13.232.165.36

The authenticity of host '13.232.165.36 (13.232.165.36)' can't be established.

ECDSA key fingerprint is

SHA256:y3XaFdWOcKmwVFsM6UQYhWiQQ7mOwjVFXIIIJ4eXzts.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added '13.232.165.36' (ECDSA) to the list of known hosts.

```
_ | _ | _ )
_ | ( / Amazon Linux AMI
_ | \ _ | _ |
```

<https://aws.amazon.com/amazon-linux-ami/2018.03-release-notes/>

1 package(s) needed for security, out of 3 available

Run "sudo yum update" to apply all updates.