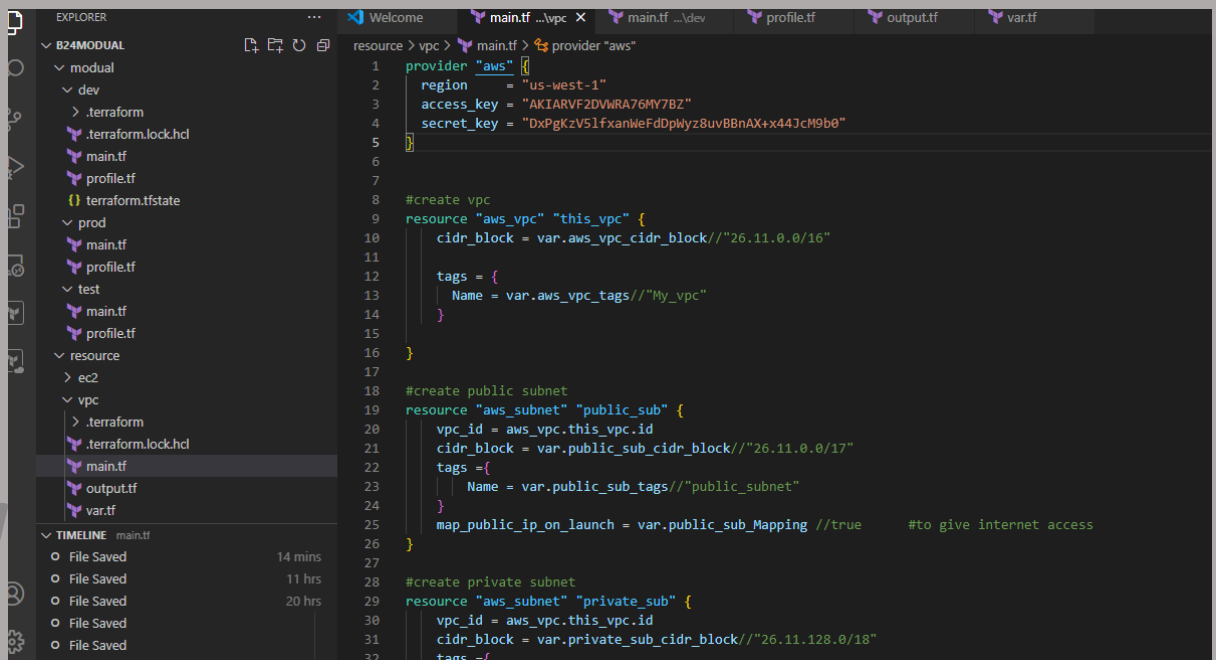


Create vpc, pub and priv subnet , route table , and IGW in module for terraform

- Main file vpc code



This screenshot shows the main Terraform file for the vpc module. The Explorer pane on the left shows the project structure with files like main.tf, profile.tf, output.tf, and var.tf. The main editor displays the following code:

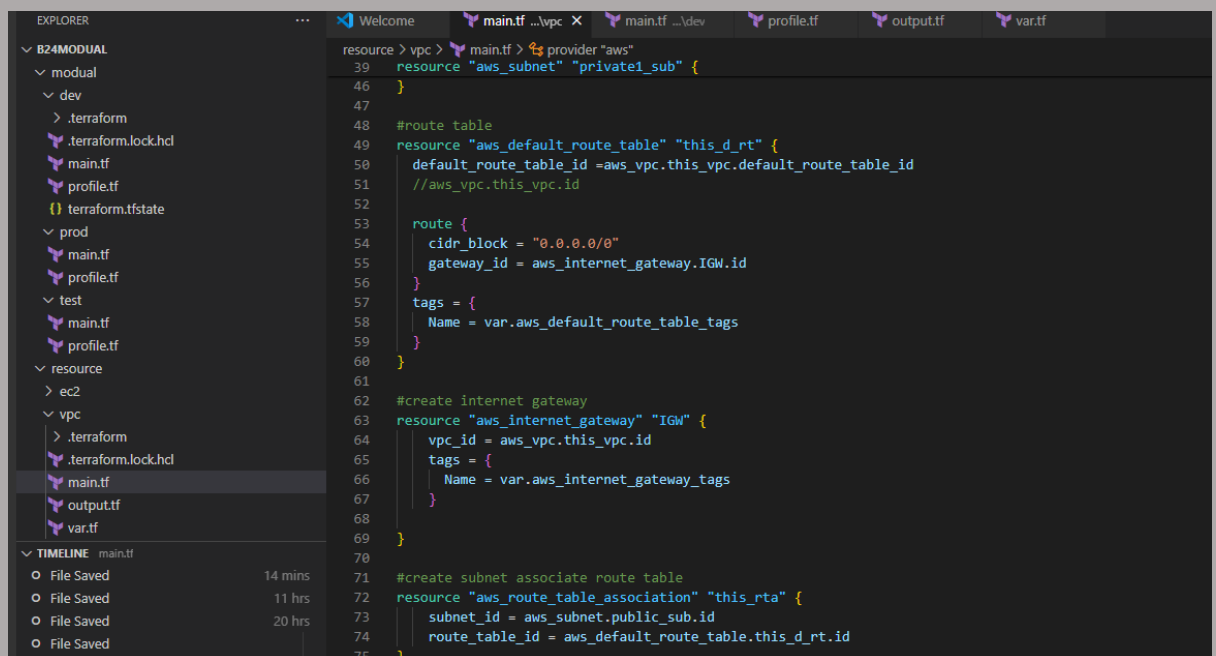
```
resource "aws_vpc" "this_vpc" {
  provider = "aws"
  region   = "us-west-1"
  access_key = "AKIARVF2DVMRA76MY7BZ"
  secret_key = "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"

  #create vpc
  resource "aws_vpc" "this_vpc" {
    cidr_block = var.aws_vpc_cidr_block/"26.11.0.0/16"

    tags = {
      Name = var.aws_vpc_tags/"My_vpc"
    }
  }

  #create public subnet
  resource "aws_subnet" "public_sub" {
    vpc_id = aws_vpc.this_vpc.id
    cidr_block = var.public_sub_cidr_block/"26.11.0.0/17"
    tags = {
      Name = var.public_sub_tags/"public_subnet"
    }
    map_public_ip_on_launch = var.public_sub_Mapping //true #to give internet access
  }

  #create private subnet
  resource "aws_subnet" "private_sub" {
    vpc_id = aws_vpc.this_vpc.id
    cidr_block = var.private_sub_cidr_block/"26.11.128.0/18"
    tags = {
```



This screenshot shows the continuation of the Terraform code in the main.tf file. The Explorer pane on the left shows the project structure. The main editor displays the following code:

```
resource "aws_subnet" "private1_sub" {
  #route table
  resource "aws_default_route_table" "this_d_rt" {
    default_route_table_id = aws_vpc.this_vpc.default_route_table_id
    //aws_vpc.this_vpc.id

    route {
      cidr_block = "0.0.0.0/0"
      gateway_id = aws_internet_gateway.IGW.id
    }
    tags = {
      Name = var.aws_default_route_table_tags
    }
  }

  #create internet gateway
  resource "aws_internet_gateway" "IGW" {
    vpc_id = aws_vpc.this_vpc.id
    tags = {
      Name = var.aws_internet_gateway_tags
    }
  }

  #create subnet associate route table
  resource "aws_route_table_association" "this_rta" {
    subnet_id = aws_subnet.public_sub.id
    route_table_id = aws_default_route_table.this_d_rt.id
  }
```

- Vpc variable code

The image shows two screenshots of a VS Code editor displaying Terraform variable definitions. A large, semi-transparent 'V' watermark is overlaid on the left side of the image.

Top Screenshot: The Explorer pane shows a project structure with modules 'dev', 'prod', 'test', and 'resource'. The 'resource' module contains an 'ec2' module and a 'vpc' module. The 'vpc' module contains files: '.terraform', '.terraform.lock.hcl', 'main.tf', 'output.tf', and 'var.tf'. The 'var.tf' file is selected, showing the following code:

```

resource > vpc > var.tf > variable "public_sub_tags"
1  # All Details of VPC
2  variable "aws_vpc_cidr_block" {
3      /* type = string
4       default = "26.11.0.0/16" */
5  }
6
7  variable "aws_vpc_tags" {
8      /* type = string //map
9       default = "My-vpc"
10     /* {
11      Name="Myvpc"
12     } */
13  }
14
15  # All Details of Public Subnet
16  variable "public_sub_cidr_block" {
17      /* type = string
18       default = "26.11.0.0/17" */
19  }
20  }
21
22  variable "public_sub_tags" {
23      /* type = string //map
24       default = "Public-subnet"
25     /* {
26      Name= "Public-subnet"
27     } */
28  }
29
30  variable "public_sub_Mapping" {
31      /* type = bool
32       default = true */

```

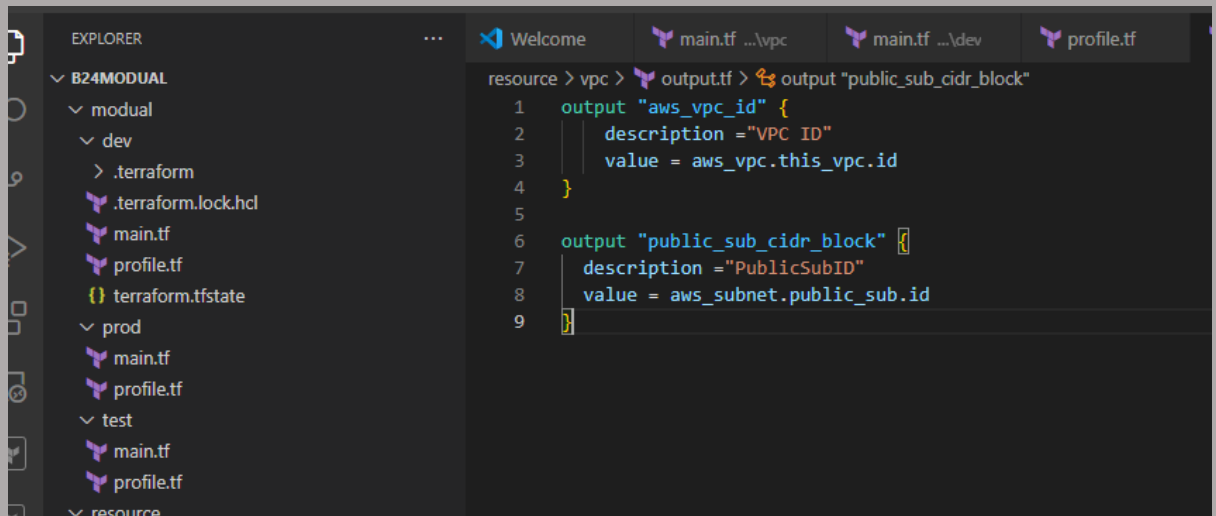
Bottom Screenshot: The Explorer pane shows the same project structure, but the 'vpc' module is expanded, showing the 'var.tf' file. The 'var.tf' file is selected, showing the following code:

```

resource > vpc > var.tf > variable "public_sub_tags"
22  variable "public_sub_tags" {
23  }
24
25  variable "public_sub_Mapping" {
26      /* type = bool
27       default = true */
28  }
29
30  # All Details of Private Subnet
31  variable "private_sub_cidr_block" {
32      /* type = string
33       default = "26.11.128.0/19" */
34  }
35  }
36
37  variable "private_sub_tags" {
38      /* type = string //map
39       default = "private-subnet"
40     /* {
41      Name= "private-subnet"
42     } */
43  }
44
45  variable "priavte_sub_Mapping" {
46      /* type = bool
47       default = false */
48  }
49
50  # All Details of Private1 Subnet

```

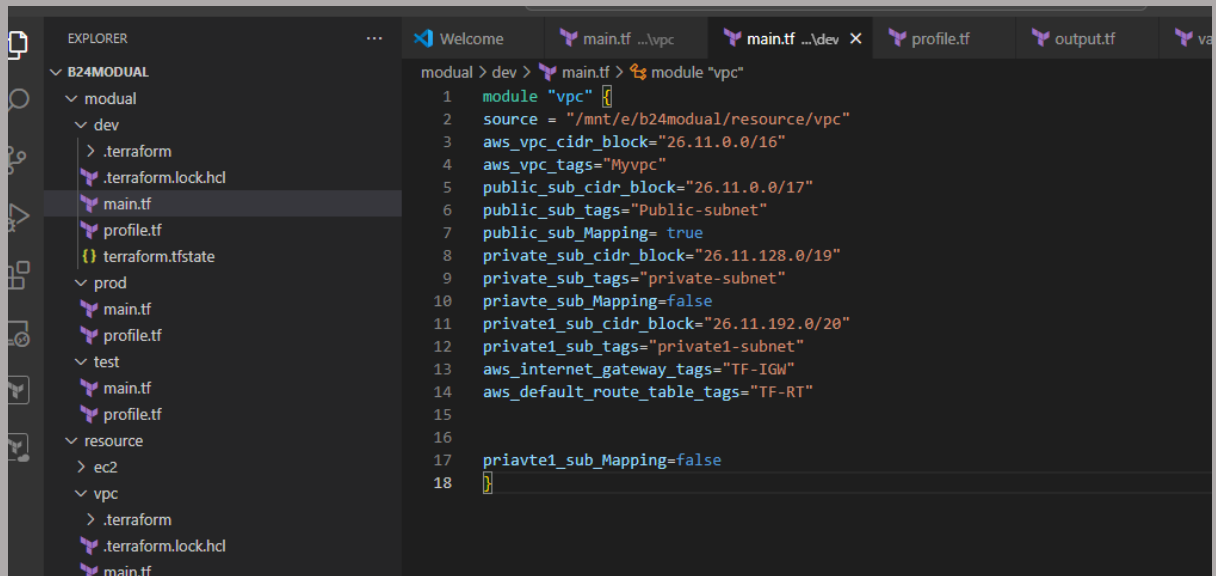
- Output



The screenshot shows the VS Code interface with the Explorer on the left and the editor on the right. The Explorer shows a project structure for 'B24MODUAL' with subdirectories 'modual', 'dev', 'prod', and 'test'. The 'dev' directory contains files like '.terraform', '.terraform.lock.hcl', 'main.tf', 'profile.tf', and 'terraform.tfstate'. The editor shows the 'output.tf' file in the 'dev' directory, which contains two output definitions:

```
resource > vpc > output.tf > output "public_sub_cidr_block"
1  output "aws_vpc_id" {
2      |   description = "VPC ID"
3      |   value = aws_vpc.this_vpc.id
4      | }
5
6  output "public_sub_cidr_block" {
7      |   description = "PublicSubID"
8      |   value = aws_subnet.public_sub.id
9      | }
```

- Dev/Main file module



The screenshot shows the VS Code interface with the Explorer on the left and the editor on the right. The Explorer shows the same project structure as the first screenshot, but with the 'main.tf' file in the 'dev' directory selected. The editor shows the 'main.tf' file in the 'dev' directory, which contains a module definition for 'vpc':

```
module > dev > main.tf > module "vpc"
1  module "vpc" {
2      source = "/mnt/e/b24modual/resource/vpc"
3      aws_vpc_cidr_block="26.11.0.0/16"
4      aws_vpc_tags="Myvpc"
5      public_sub_cidr_block="26.11.0.0/17"
6      public_sub_tags="Public-subnet"
7      public_sub_Mapping= true
8      private_sub_cidr_block="26.11.128.0/19"
9      private_sub_tags="private-subnet"
10     priavte_sub_Mapping=false
11     private1_sub_cidr_block="26.11.192.0/20"
12     private1_sub_tags="private1-subnet"
13     aws_internet_gateway_tags="TF-IGW"
14     aws_default_route_table_tags="TF-RT"
15
16
17     priavte1_sub_Mapping=false
18 }
```

- Terraform apply

```

+ enable_network_address_usage_metrics = (known after apply)
+ id                                   = (known after apply)
+ instance_tenancy                     = "default"
+ ipv6_association_id                 = (known after apply)
+ ipv6_cidr_block                      = (known after apply)
+ ipv6_cidr_block_network_border_group = (known after apply)
+ main_route_table_id                 = (known after apply)
+ owner_id                             = (known after apply)
+ tags                                 = {
  + "Name" = "Myvpc"
}
+ tags_all                               = {
  + "Name" = "Myvpc"
}
}

```

lan: 7 to add, 0 to change, 0 to destroy.

odule.vpc.aws_vpc.this_vpc: Creating...

odule.vpc.aws_vpc.this_vpc: Creation complete after 5s [id=vpc-0b94dfdbc9c8cdfb7]

odule.vpc.aws_internet_gateway.IGW: Creating...

odule.vpc.aws_subnet.private1_sub: Creating...

odule.vpc.aws_subnet.public_sub: Creating...

odule.vpc.aws_subnet.private_sub: Creating...

odule.vpc.aws_subnet.private_sub: Creation complete after 3s [id=subnet-02c3400329c3c013a]

odule.vpc.aws_subnet.private1_sub: Creation complete after 3s [id=subnet-0dfcf1314b0905990]

odule.vpc.aws_internet_gateway.IGW: Creation complete after 3s [id=igw-08d4512cb0fbdd6c8]

odule.vpc.aws_default_route_table.this_d_rt: Creating...

odule.vpc.aws_default_route_table.this_d_rt: Creation complete after 2s [id=rtb-043d2873a0475956a]

odule.vpc.aws_subnet.public_sub: Still creating... [10s elapsed]

odule.vpc.aws_subnet.public_sub: Creation complete after 14s [id=subnet-0f5c8254797e8d9e6]

odule.vpc.aws_route_table_association.this_rta: Creating...

odule.vpc.aws_route_table_association.this_rta: Creation complete after 1s [id=rtbassoc-07b04dc6e8e584d9d]

Apply complete! Resources: 7 added, 0 changed, 0 destroyed.

vaibhav@DESKTOP-P3NSBEM: /mnt/e/b24modual/modual/dev\$ |

- Create vpc with subnet, route table, igw

