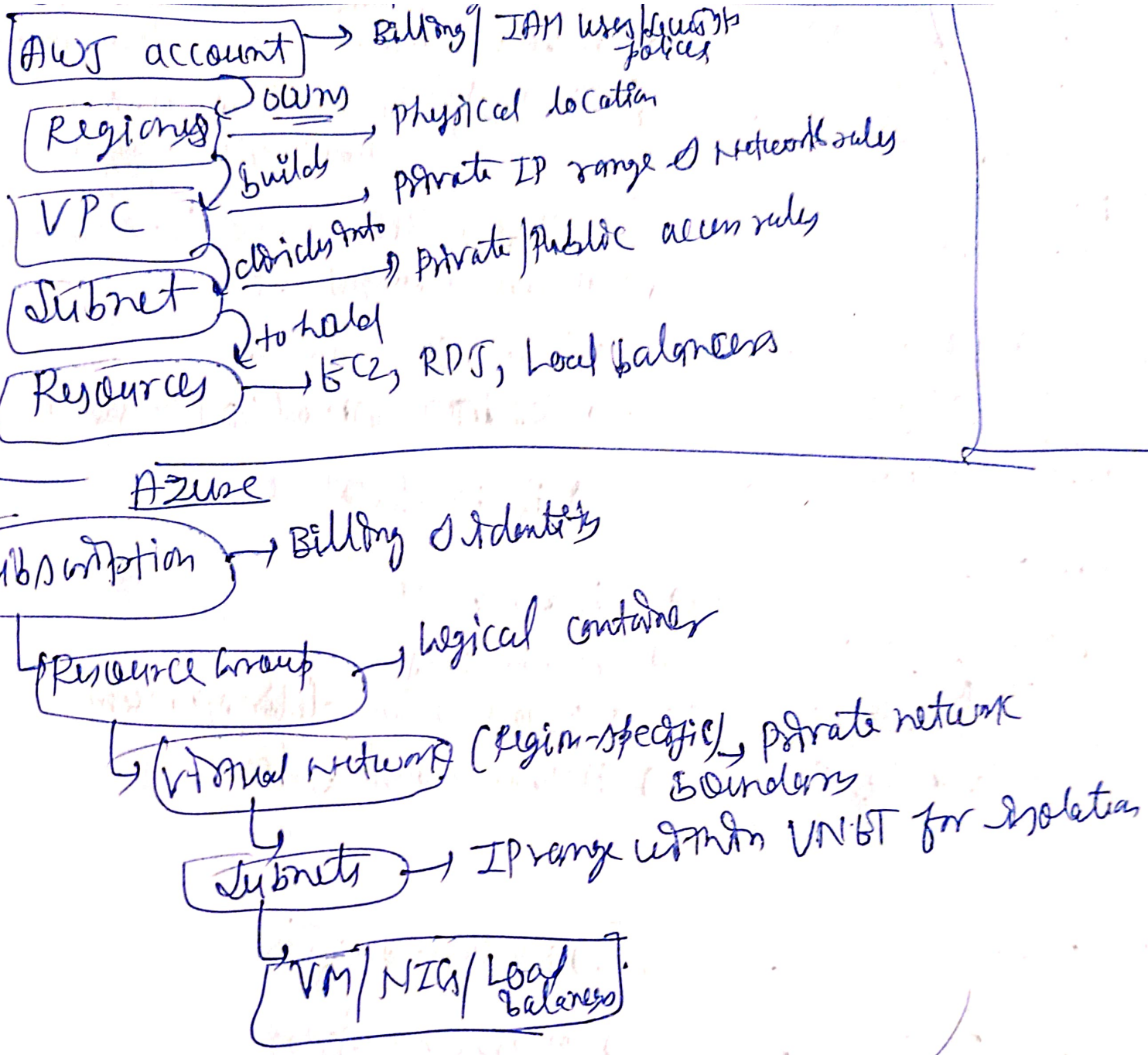
AWS account
Billing / IAM users / policies
owns
Regions
physical location
build
VPC
private IP range & network rules
divide into
Subnet
private / public access rules
to hold
Resources
EC2, RDS, Load balancers

Azure

Subscription
Billing & identity
Resource Group
logical container
Virtual network
(region-specific) private network boundary
Subnets
IP range within VNET for isolation
VM / NICs / Load balancer

	AWS	Azure
Compute Service (Brain)	EC2 (Resizable Virtual servers) AWS Lambda (Serverless compute that runs code only when triggered by events) Elastic Beanstalk (Orchestration that automates deployment, scaling & load balancing for web Apps)	Azure VM (Resizable Virtual servers) Azure functions (serverless compute) Azure service App (HTTP based service for hosting web applications, REST APIs)
Storage & Data Base (Memory)	S3 (Scalable object store for files) EBS (Persistent block storage volumes for EC2 (hard drive)) RDS (managed relational databases (mysql, oracle) DynamoDB (Fully managed NOSQL database for high speed data) Aurora → High performance, AWS-Native	Azure Blob Storage (scalable object storage) Azure managed disk Azure SQL database Cosmos DB (NoSQL) Azure database
Networking & content delivering	Amazon VPC (Private, isolated section of AWS cloud) Route 53 → Highly available Domain Name System. CloudFront → content delivery network Elastic load Balancing → distributes incoming traffic across multiple targets.	Azure VNet Azure DNS Azure content delivery network Azure load balancer.
Security & Management	AWS IAM (manages users & access) Cloud watch (Monitoring services for resources & application) cloud Trail → Audit logs of every action taken in your AWS Account AWS Artifacts → Portal for on demand access to AWS compliance reports (PCI, SOC, ISO)	Microsoft Entra ID Azure monitor Azure Activity log Azure test center.

Cloud deployment models
- Public (AWS)
- Private (On-Premise)
- Hybrid (Mix of both)

EC2, EBS, S3, VPC, Virtual machine

Service models

IaaS → (Infrastructure as a service)
You manage → OS, Runtime, middleware, Apps
Cloud providers manage → Physical servers, Storage, Networking

PaaS (Platform as a service)
What you manage → Application code
Cloud provider → OS, runtime, scaling, patching, hosting

App services, Lambda

SaaS (Software as a service)
You manage → only usages & configs
Cloud provides → Everything

Gmail, Google drive, Salesforce, Slack