Domain 3 - Cloud tech & Service - (If possible just memorise core of 119 PDF for each service). DISCLAIMER - This is **BARE MINIMUM**. USE other resources to ascertain beefier knowledge. Also missing CAF (Cloud adoption framework etc so use tutorial dojo) - **pages 9-16 are best**

📌 *Task Statement 3.1 – Define Methods of Deploying and Operating in the AWS Cloud*

☁️ Cloud Deployment Models

- **Public Cloud**: Resources run entirely on AWS.
  ➡️ *Use Case*: Host web apps without owning any infrastructure.

- **Private Cloud (On-premises)**: Infrastructure hosted in your own data center.
  ➡️ *Use Case*: Legacy systems or strict compliance needs.

- **Hybrid Cloud**: Combines on-prem with AWS.
  ➡️ *Use Case*: Gradual migration, backup/DR, or latency-sensitive apps.

🔌 Connectivity Options

- **AWS VPN**: Securely connect on-premises networks to AWS via encrypted tunnels.
  ➡️ *Use Case*: Quick, cost-effective hybrid cloud setup.

- **AWS Direct Connect**: Dedicated private network connection between AWS and your on premise data center.
  ➡️ *Use Case*: High-throughput, low-latency workloads like large data transfers.

- **Public Internet**: Access AWS over the standard web.
  ➡️ *Use Case*: Lightweight, non-sensitive data use or prototyping.

🛠️ Ways to Provision & Operate AWS

- **AWS Management Console**: Browser-based UI.
  ➡️ *Use Case*: Manual tasks, visual workflows, learning.

- **AWS CLI / SDKs**: Command-line and programmatic access.
  ➡️ *Use Case*: Scripted deployments, automation.

- **Infrastructure as Code (IaC)** (e.g., AWS CloudFormation, CDK, Terraform):
  ➡️ *Use Case*: Repeatable, scalable, version-controlled infra setups.

🔁 Operations Approaches

- **One-time Operations**: Manual or scripted tasks done once.
  ➡️ *Use Case*: Launching a single dev/test EC2 instance.

- **Repeatable Automation**: Code-defined workflows, templates, and pipelines.
  ➡️ *Use Case*: Multi-region deployment pipelines, scalable architectures.

✅ **Key Takeaway**: AWS offers flexible deployment and access models—from GUI to full automation—and supports hybrid and cloud-native workloads with scalable connectivity options.

📌 *Task Statement 3.2 – Identify AWS Compute Services*

🖥️ Amazon EC2 (Elastic Compute Cloud)

- **Definition**: Resizable virtual servers with full OS control.
- **Billing**: Pay per hour or second. Offers On-Demand, Reserved, Spot.
- **Granular Control**: Choose AMIs, networking, storage, and instance types.
  ➡️ *Use Case*: Custom software setups, hosting game servers, databases, or legacy apps.

📈 EC2 Auto Scaling

- **Definition**: Automatically adjusts EC2 fleet based on demand or schedules.
- **Integration**: Works with CloudWatch alarms and target tracking.
  ➡️ *Use Case*: Handle peak traffic for e-commerce apps or optimize costs in dev environments.

⚡ AWS Lambda

- **Definition**: Serverless compute that runs code in response to events (e.g., S3, API Gateway).
- **Zero Infrastructure Management**: Just write code.
  ➡️ *Use Case*: Process user uploads, run backend REST APIs, or automate scheduled tasks.

🌱 Elastic Beanstalk

- **Definition**: Platform-as-a-Service (PaaS) for quick deployment of web apps in known stacks (Java, Python, Node.js).
- **Managed Environment**: AWS handles load balancing, patching, scaling.
  ➡️ *Use Case*: Launching an MVP or full-stack app without needing to configure infrastructure.

📦 Amazon ECS / EKS

- **ECS (Elastic Container Service)**: Native AWS container orchestration using EC2 or Fargate.
- **EKS (Elastic Kubernetes Service)**: Fully managed Kubernetes control plane.
  ➡️ *Use Case*: Deploy microservices or CI/CD workflows in Docker containers.

🚀 AWS Fargate

- **Definition**: Serverless container compute engine for ECS/EKS. No server provisioning.
- **Billing**: Based on vCPU and memory used per second.
  ➡️ *Use Case*: Scalable container workloads where you don't want to manage instances.

✅ **Key Takeaway**: AWS compute options range from full control (EC2), managed environments (Beanstalk, ECS/EKS), to zero-management serverless (Lambda, Fargate). Choose based on desired control, app architecture, and scaling needs.

📌 *Task Statement 3.3 – Identify AWS Storage Services*

📂 Amazon S3 (Simple Storage Service)

- **Definition**: Scalable object storage with 99.999999999% durability.
- **Lifecycle Rules**: Move objects to Glacier or delete them based on policy.
- **Storage Classes**: Standard, IA, One Zone-IA, Glacier, Deep Archive.
  ➡️ *Use Case*: Host static websites, data lakes, logs, backups, or user-uploaded media.

📦 Amazon EBS (Elastic Block Store)

- **Definition**: Block-level storage volumes for EC2. Persistent and attachable.
- **Types**: General Purpose SSD (gp3), Provisioned IOPS (io2), Throughput Optimized (st1).
  ➡️ *Use Case*: Databases, file systems, or apps needing fast, consistent I/O.

📁 Amazon EFS (Elastic File System)

- **Definition**: Scalable NFS-based file storage for Linux workloads.
- **Access**: Mount across multiple EC2 instances in a VPC.
  ➡️ *Use Case*: Shared storage for apps, web servers, or container clusters.

❄️ Amazon S3 Glacier / Deep Archive

- **Definition**: Cold storage for long-term data archiving.
- **Retrieval Times**: Glacier (minutes to hours), Deep Archive (12+ hours).
  ➡️ *Use Case*: Archiving compliance logs, medical records, video archives.

✅ **Key Takeaway**: Pick storage based on access patterns — Object (S3), Block (EBS), File (EFS), or Archive (Glacier). Each is optimized for cost, performance, and access frequency.

📌 *Task Statement 3.4 – Identify AWS Network and Content Delivery Services*

🌐 Amazon VPC (Virtual Private Cloud)

- **Definition**: Custom virtual network with IP ranges, subnets, route tables, and gateways.
- **Control**: Launch EC2s in private/public subnets with custom firewall rules.
  ➡️ *Use Case*: Build secure multi-tier apps with public frontends and private backends.

🔄 Elastic Load Balancing (ELB)

- **Types**: Application (ALB), Network (NLB), Gateway (GWLB), Classic (CLB).
- **Function**: Spread incoming traffic across targets in one or more AZs.
  ➡️ *Use Case*: Distribute HTTP requests to EC2 or container services.

🛣️ Amazon Route 53

- **Definition**: Scalable DNS and domain registration service.
- **Routing Policies**: Simple, Latency-based, Failover, Weighted.
  ➡️ *Use Case*: Route users to nearest AWS region, perform health-based failovers.

🌍 Amazon CloudFront

- **Definition**: Content Delivery Network (CDN) caching content at edge locations.
- **Integration**: Works with S3, ALB, EC2, or Lambda@Edge.
  ➡️ *Use Case*: Speed up static/dynamic content delivery globally (e.g., images, video).

📡 AWS Direct Connect

- **Definition**: Private, dedicated line to AWS from your data center.
- **Performance**: More reliable and lower-latency than VPN.
  ➡️ *Use Case*: Large enterprises migrating or syncing massive data volumes.

✅ **Key Takeaway**: AWS provides flexible networking: from isolated VPCs and scalable load balancers to global CDNs and private links (Direct Connect) — tailored for any architecture.

📌 *Task Statement 3.5 – Identify AWS Database Services*

🗃️ Amazon RDS (Relational Database Service)

- **Engines**: MySQL, PostgreSQL, MariaDB, Oracle, SQL Server.
- **Automation**: Backups, patching, scaling, high availability (Multi-AZ).
  ➡️ *Use Case*: Backend for transactional applications (e-commerce, CRM, CMS).

🪵 Amazon DynamoDB

- **Definition**: Managed NoSQL key-value and document DB with single-digit millisecond latency.
- **Features**: Autoscaling, DAX caching, Global Tables, TTL.
  ➡️ *Use Case*: User session data, IoT apps, gaming leaderboards.

🔄 Amazon Aurora

- **Definition**: MySQL/PostgreSQL-compatible managed relational DB with up to 5x MySQL performance.
- **Autoscaling**: Serverless version available for variable workloads.
  ➡️ *Use Case*: High-performance apps needing availability and speed.

🧠 Amazon Redshift

- **Definition**: Managed OLAP data warehouse for analytics.
- **Integration**: Supports SQL, integrates with QuickSight, S3, and ML tools.
  ➡️ *Use Case*: Analyze petabytes of structured data for business intelligence.

✅ **Key Takeaway**: AWS database options include relational (RDS, Aurora), NoSQL (DynamoDB), and analytics (Redshift). Each is optimized for different use cases and scalability needs.

📌 *Task Statement 3.6 – Identify AWS Management and Monitoring Services*

📊 Amazon CloudWatch

- **Functions**: Collect metrics, logs, alarms, dashboards.
- **Integration**: Supports EC2, Lambda, RDS, ECS, and custom apps.
  ➡️ *Use Case*: Alert if EC2 CPU > 80%, visualize Lambda errors, track EBS IOPS.

🔐 AWS CloudTrail

- **Definition**: Logs all API activity (who did what, when, and from where).
- **Compliance**: Crucial for security audits and troubleshooting.
  ➡️ *Use Case*: Detect unauthorized access, prove compliance with regulations.

🧪 AWS Config

- **Definition**: Tracks config changes and compliance status of AWS resources.
- **Features**: Rules engine for policy enforcement.
  ➡️ *Use Case*: Identify non-compliant S3 buckets that allow public access.

🛠️ AWS Systems Manager

- **Definition**: Central hub for operations, automation, and patch management.
- **Capabilities**: Run commands, patch fleets, view inventory, use Session Manager.
  ➡️ *Use Case*: Automate OS patching across 100+ EC2s without logging in manually.

✅ **Key Takeaway**: AWS offers tools to monitor, audit, and automate cloud resources. CloudWatch sees performance, CloudTrail tracks actions, Config checks compliance, and Systems Manager runs ops at scale.

📌 *Task Statement 3.7 – Identify AWS Support Plans*

📘 Basic Support (Free)

- **Includes**: 24/7 access to billing, docs, whitepapers, forums.
  ➡️ *Use Case*: Individual learners, experiments, or billing queries.

📗 Developer Support

- **Includes**: Business-hours email to Cloud Support Associates.
- **Focus**: Guidance for dev/test environments.
  ➡️ *Use Case*: Small dev teams working on non-production applications.

📙 Business Support

- **Includes**: 24/7 email/chat/phone to Support Engineers + Trusted Advisor full checks.
- **SLA**: 1-hour response for urgent cases.
  ➡️ *Use Case*: Production apps requiring high availability and fast support.

📕 Enterprise Support

- **Includes**: Technical Account Manager (TAM), concierge support, and architecture reviews.
- **SLA**: 15-minute response for critical issues.
  ➡️ *Use Case*: Large-scale, mission-critical systems in finance, healthcare, etc.

✅ **Key Takeaway**: Support plans scale with business needs — from documentation and dev help (Basic/Developer) to white-glove, enterprise-grade support (Business/Enterprise).

****below from page 9-16 - One sentence for each service function MUST MEMORISE****

****This is the bare minimum, there are other beefier resources that provide far greater detail of each service etc - pls ascertain knowledge via exam questions****

3.8 extra - 📌 AWS ALL IN SCOPE SERVICES TO KNOW/DISTINGUISH.

📊 Analytics

- **Athena:** Query data directly from S3 using standard SQL without needing to manage any infrastructure — great for ad hoc data analysis.
- **Data Exchange:** Find, subscribe to, and use third-party data sets in your AWS environment to enhance analytics or apps.
- **EMR:** Managed Hadoop and Spark clusters that allow you to process big data workloads like log analysis or machine learning pipelines.
- **Glue:** Serverless ETL (Extract, Transform, Load) service to prepare, clean, and move data between stores automatically.
- **Kinesis:** Real-time streaming service to ingest, process, and analyze large streams of data like logs, events, or metrics.
- **MSK:** Managed Apache Kafka service to build scalable streaming data pipelines and real-time apps with minimal maintenance.
- **OpenSearch:** Search and analytics engine for real-time application monitoring, log analytics, and full-text search.
- **QuickSight:** Cloud-native business intelligence tool for creating interactive dashboards and visualizing data quickly.
- **Redshift:** Fully managed, petabyte-scale data warehouse designed for fast complex queries and analytics.

🔗 Application Integration

- **EventBridge:** Serverless event bus to build event-driven architectures and integrate AWS services or SaaS apps seamlessly.
- **SNS:** Managed pub/sub messaging service for sending notifications and messages to distributed systems or users.
- **SQS:** Fully managed message queuing service to decouple and scale microservices, distributed systems, and serverless apps.
- **Step Functions:** Coordinate multiple AWS services into serverless workflows using a visual state machine with retries and error handling.

💼 Business Applications

- **Connect:** Cloud-based contact center service that leverages AI for intelligent customer service and interaction management.
- **SES:** Simple Email Service for sending both marketing and transactional emails with high deliverability and low cost.

💰 Cloud Financial Management

- **Billing Conductor:** Tool to create custom billing reports and allocate costs across multiple AWS accounts efficiently.
- **Budgets:** Set up cost and usage thresholds with notifications to avoid surprises on your AWS bill.
- **Cost & Usage Report:** Detailed, granular billing data export for in-depth financial analysis and chargeback.
- **Cost Explorer:** Visual tool to analyze AWS costs, usage patterns, and identify savings opportunities.
- **Marketplace:** Platform to find, buy, and deploy software, data products, and services that integrate with AWS.

🖥️ Compute

- **Batch:** Fully managed batch processing at any scale without provisioning servers, ideal for compute-heavy jobs.
- **EC2:** Scalable virtual servers in the cloud where you have full control over the OS and software stack.
- **Elastic Beanstalk:** Platform as a Service (PaaS) to deploy, manage, and scale web applications with minimal setup.
- **Lightsail:** Simplified VPS solution with predictable pricing for small web apps, websites, or dev/test environments.
- **Local Zones:** AWS infrastructure deployed closer to end users to reduce latency for time-sensitive applications.

- **Outposts:** Extend AWS infrastructure, services, APIs, and tools on-premises for hybrid cloud deployments.
- **Wavelength:** Run apps at the edge in 5G networks for ultra-low latency, supporting AR/VR and IoT use cases.

🐳 Containers

Elastic Container Registry (ECR) - Fully managed Docker container registry for storing, managing, and deploying container images securely.

Elastic Container Service (ECS) - Highly scalable container orchestration service that runs and manages Docker containers on a managed cluster of EC2 instances.

Elastic Kubernetes Service (EKS) - Fully managed Kubernetes service simplifying running Kubernetes clusters on AWS with integrated security and scalability.

🤝 Customer Engagement

- **Activate:** Startup program offering AWS credits, training, and support to help new businesses scale.
- **IQ:** Connect with AWS-certified experts and consultants for project-specific help.
- **Managed Services:** AWS team manages your infrastructure operations and maintenance.
- **Support:** Various support plans offering 24/7 technical help and architectural guidance.

🗄️ Database

- **Aurora:** High-performance managed relational database compatible with MySQL and PostgreSQL, offering better scalability and availability.
- **DynamoDB:** NoSQL database with single-digit millisecond latency, ideal for high-scale applications with flexible data models.

- **MemoryDB:** Fully managed, Redis-compatible in-memory database for ultra-fast, low-latency workloads.
- **Neptune:** Fully managed graph database optimized for storing and querying highly connected data like social networks.
- **RDS:** Managed relational databases supporting multiple engines (MySQL, PostgreSQL, Oracle, SQL Server) with automatic backups and patching.

🛠️ Developer Tools

- **CLI:** Command-line interface to manage and automate AWS services and resources.
- **Cloud9:** Cloud-based IDE for writing, running, and debugging code directly in your browser.
- **CodeCommit:** Fully managed, secure Git repositories for source control.
- **CodeBuild:** Scalable build service to compile, test, and package your code.
- **CodeDeploy:** Automate code deployments to EC2 instances, Lambda, or on-prem servers.
- **CodePipeline:** Continuous integration and delivery service to automate build, test, and deployment workflows.
- **CodeStar:** Unified dashboard to manage software development activities and team collaboration.
- **AppConfig:** Deploy application configurations safely and quickly with controlled rollouts.
- **CloudShell:** Browser-based shell preconfigured with AWS CLI and tools, no setup required.
- **CodeArtifact:** Secure artifact repository for managing software packages used in development.
- **X-Ray:** Distributed tracing tool to analyze and debug microservices architectures.

🖥️ End User Computing

- **AppStream 2.0:** Stream desktop applications securely to any device without rewriting apps.

- **WorkSpaces:** Managed, secure virtual desktops accessible from anywhere.
- **WorkSpaces Web:** Secure browser-based access to internal web applications without client installation.

📱 Frontend Web & Mobile

- **Amplify:** Framework and service to build, deploy, and host full-stack web and mobile apps with integrated backend.
- **AppSync:** Managed GraphQL service to build real-time, offline, and sync-enabled mobile and web apps.
- **Device Farm:** Test your mobile apps across a wide range of real devices in the AWS Cloud.

🌐 IoT

- **IoT Core:** Connect, manage, and secure billions of IoT devices and route messages reliably.
- **IoT Greengrass:** Extend AWS to edge devices to run Lambda functions, messaging, and machine learning offline.

🤖 Machine Learning

- **SageMaker:** Comprehensive service for building, training, and deploying machine learning models at scale.
- **Comprehend:** Natural Language Processing (NLP) service to extract insights like sentiment, entities, and topics from text.
- **Kendra:** Intelligent search service that uses ML to provide relevant answers from unstructured data.
- **Lex:** Build conversational interfaces such as chatbots with automatic speech recognition and natural language understanding.
- **Polly:** Text-to-speech service that converts text into lifelike spoken audio.

- **Rekognition:** Analyze images and videos to detect objects, people, text, scenes, and activities.
- **Textract:** Automatically extract text and data from scanned documents without manual effort.
- **Transcribe:** Convert speech-to-text for applications like subtitles or voice commands.
- **Translate:** Neural machine translation service to convert text between languages.

⚙️ Management & Governance

- **Auto Scaling:** Automatically adjust compute resources to maintain performance and reduce cost.
- **CloudFormation:** Infrastructure as Code service to model and provision AWS resources with templates.
- **CloudTrail:** Track and log all API calls and user activity for auditing and compliance.
- **CloudWatch:** Monitoring service for AWS resources and applications with metrics, logs, and alarms.
- **Compute Optimizer:** Uses ML to recommend optimal resource types and sizes to save cost and improve performance.
- **Config:** Continuously monitors and records AWS resource configurations for compliance auditing.
- **Control Tower:** Automate setup of multi-account AWS environments with governance guardrails.
- **Health Dashboard:** Provides personalized alerts and remediation guidance for AWS service events.
- **Launch Wizard:** Guided deployment of complex workloads like SAP and SQL Server.
- **License Manager:** Track and manage software licenses to ensure compliance.
- **Management Console:** Web-based graphical interface to manage AWS resources and services.
- **Organizations:** Centrally manage billing, policies, and security for multiple AWS accounts.
- **Resource Groups & Tag Editor:** Organize AWS resources by grouping and tagging for easier management.

- **Service Catalog:** Create and manage approved IT service catalogs for users and teams.
- **Systems Manager:** Centralized operations hub to automate operational tasks and patch management.
- **Trusted Advisor:** Analyze AWS environment and provide recommendations to optimize performance, security, and costs.
- **Well-Architected Tool:** Review workloads against AWS best practices and identify improvements.

🔄 Migration & Transfer

- **App Discovery:** Automatically collect inventory and dependencies to plan migrations.
- **Application Migration Service:** Simplify lift-and-shift migrations by replicating on-premises servers to AWS.
- **Database Migration Service:** Migrate databases to AWS with minimal downtime and continuous data replication.
- **Migration Hub:** Track and manage the progress of application migrations across multiple AWS tools.
- **Schema Conversion Tool:** Convert database schemas and code from legacy databases to AWS-native formats.
- **Snow Family:** Physical devices to securely transfer large amounts of data to AWS offline.
- **Transfer Family:** Managed file transfer over SFTP, FTPS, and FTP directly into and out of S3.

🌐 Networking & Content Delivery

- **API Gateway:** Create, publish, and secure RESTful and WebSocket APIs with high performance and scalability.
- **CloudFront:** Global content delivery network (CDN) that caches content closer to users for faster access.

- **Direct Connect:** Establish dedicated, private network connections from your data center to AWS.
- **Global Accelerator:** Improve global application availability and performance using AWS's global network.
- **Route 53:** Scalable DNS and domain registration service with routing policies.
- **VPC:** Virtual private cloud providing isolated, secure networks for AWS resources.
- **VPN:** Encrypted connections from on-premises or remote locations to AWS.

🔒 Security, Identity & Compliance

- **Artifact:** Access AWS compliance reports and agreements.
- **Audit Manager:** Automate evidence collection and audit workflows to simplify compliance.
- **Certificate Manager:** Provision, manage, and deploy SSL/TLS certificates for secure communications.
- **CloudHSM:** Dedicated hardware security modules for cryptographic key management.
- **Cognito:** User authentication, authorization, and user management for web and mobile apps.
- **Detective:** Investigate and analyze potential security issues using automated data analysis.
- **Directory Service:** Managed Microsoft Active Directory for user and resource management.
- **Firewall Manager:** Centralized management of AWS WAF and firewall rules across accounts.
- **GuardDuty:** Intelligent threat detection service using machine learning to identify malicious activity.
- **IAM:** Manage user access, roles, and permissions securely across AWS resources.
- **IAM Identity Center (SSO):** Simplified user access management across multiple AWS accounts and applications.
- **Inspector:** Automated security assessments to identify vulnerabilities and deviations.
- **KMS:** Create and control encryption keys used to protect your data.

- **Macie:** Discover and protect sensitive data like personally identifiable information (PII) using ML.
- **Network Firewall:** Deploy managed network firewalls for VPC traffic filtering.
- **Resource Access Manager:** Share AWS resources securely across accounts.
- **Secrets Manager:** Safely store and rotate sensitive credentials like API keys and passwords.
- **Security Hub:** Centralized dashboard for security alerts and compliance status.
- **Shield:** Managed DDoS protection to safeguard web applications.
- **WAF:** Web Application Firewall to protect web apps from common exploits.

🚀 Serverless

- **Fargate:** Run containers serverless without managing servers or clusters.
- **Lambda:** Run code in response to events without provisioning or managing servers.

💾 Storage

- **Backup:** Centralized backup service to automate and manage backups across AWS services.
- **EBS:** Block storage volumes that attach to EC2 instances for persistent data storage.
- **EFS:** Fully managed scalable file storage accessible from multiple EC2 instances simultaneously.

—-

MUST READ

- This does not contain all info for the exam but acts as a bare minimum. Please use resources below

All exam tasks act as a fence not the be all-end all of exam content according to AWS.

AWS CLF-C02 exam Guide with each domain and corresponding task statements:
https://d1.awsstatic.com/training-and-certification/docs-cloud-practitioner/AWS-Certified-Cloud-Practitioner_Exam-Guide.pdf

Other resources for more beefy knowledge for each service -
https://tutorialsdojo.com/aws-cheat-sheets/

Also the 119 PDF doc for each service sent to us by our instructor.

—----------

Chat Gpt Prompt to emulate exam prac questions
I'm preparing for the AWS Cloud Practitioner Exam.**CLF-C02.**
Your job is to **emulate the AWS Exam.**
I need you to create questions on **Domain 3: Cloud Technology & Services** from the AWS exam.
Do one question at a time, don't reveal the answer till I ask.
Ensure it's the same difficulty as the exam to thoroughly prepare me to ace it.
Pleasure ensures the difficulty of the exam as I must ace it. (**ensure the difficulty is the same as the exam**). Focus on **helping me memorise each service function and distinguishing their use cases**.
(can adjust this for specific service categories e.g Analytics, Application Integration, Compute, Containers, Customer Engagement, Databases, Storage etc)

—----------

Below are also all the services you must know just like from above but in a cleaner list without definition. . TRY TO AT LEAST KNOW THE FUNCTIONS (ONE SENTENCE PER SERVICE MINIMUM FOR MOST CLF C02 EXAM Q'S, AND ENSURE YOU CAN DISTINGUISH EACH SERVICE WITHIN EACH CATEGORY FROM ITS COUNTERPARTS.

Analytics:
• Amazon Athena
• AWS Data Exchange
• Amazon EMR
• AWS Glue
• Amazon Kinesis
• Amazon Managed Streaming for Apache Kafka (Amazon MSK)
• Amazon OpenSearch Service
• Amazon QuickSight
• Amazon Redshift

Application Integration:
• Amazon EventBridge
• Amazon Simple Notification Service (Amazon SNS)
• Amazon Simple Queue Service (Amazon SQS)
• AWS Step Functions

Business Applications:
• Amazon Connect
• Amazon Simple Email Service (Amazon SES)

Cloud Financial Management:
• AWS Billing Conductor
• AWS Budgets
• AWS Cost and Usage Report
• AWS Cost Explorer
• AWS Marketplace

Compute:
• AWS Batch
• Amazon EC2
• AWS Elastic Beanstalk
• Amazon Lightsail
• AWS Local Zones
• AWS Outposts
• AWS Wavelength

Containers:
• Amazon Elastic Container Registry (Amazon ECR)
• Amazon Elastic Container Service (Amazon ECS)
• Amazon Elastic Kubernetes Service (Amazon EKS)

Customer Engagement:
• AWS Activate for Startups
• AWS IQ
• AWS Managed Services (AMS)
• AWS Support

Database:
• Amazon Aurora
• Amazon DynamoDB
• Amazon MemoryDB for Redis
• Amazon Neptune
• Amazon RDS

Developer Tools:
• AWS AppConfig
• AWS CLI
• AWS Cloud9
• AWS CloudShell
• AWS CodeArtifact
• AWS CodeBuild
• AWS CodeCommit
• AWS CodeDeploy
• AWS CodePipeline
• AWS CodeStar
• AWS X-Ray

End User Computing:
• Amazon AppStream 2.0
• Amazon WorkSpaces
• Amazon WorkSpaces Web

Frontend Web and Mobile:
• AWS Amplify
• AWS AppSync
• AWS Device Farm

Internet of Things (IoT):
• AWS IoT Core
• AWS IoT Greengrass

Machine Learning:
• Amazon Comprehend
• Amazon Kendra
• Amazon Lex

• Amazon Polly
• Amazon Rekognition
• Amazon SageMaker
• Amazon Textract
• Amazon Transcribe
• Amazon Translate

Management and Governance:
• AWS Auto Scaling
• AWS CloudFormation
• AWS CloudTrail
• Amazon CloudWatch
• AWS Compute Optimizer
• AWS Config
• AWS Control Tower
• AWS Health Dashboard
• AWS Launch Wizard
• AWS License Manager
• AWS Management Console
• AWS Organizations
• AWS Resource Groups and Tag Editor
• AWS Service Catalog
• AWS Systems Manager
• AWS Trusted Advisor
• AWS Well-Architected Tool

Migration and Transfer:
• AWS Application Discovery Service
• AWS Application Migration Service
• AWS Database Migration Service (AWS DMS)
• AWS Migration Hub
• AWS Schema Conversion Tool (AWS SCT)
• AWS Snow Family
• AWS Transfer Family

Networking and Content Delivery:
• Amazon API Gateway
• Amazon CloudFront
• AWS Direct Connect
• AWS Global Accelerator
• Amazon Route 53
• Amazon VPC
• AWS VPN

Security, Identity, and Compliance:
• AWS Artifact
• AWS Audit Manager
• AWS Certificate Manager (ACM)
• AWS CloudHSM
• Amazon Cognito
• Amazon Detective
• AWS Directory Service
• AWS Firewall Manager
• Amazon GuardDuty
• AWS Identity and Access Management (IAM)
• AWS IAM Identity Center (AWS Single Sign-On)
• Amazon Inspector
• AWS Key Management Service (AWS KMS)
• Amazon Macie
• AWS Network Firewall
• AWS Resource Access Manager (AWS RAM)
• AWS Secrets Manager
• AWS Security Hub
• AWS Shield
• AWS WAF

Serverless:
• AWS Fargate
• AWS Lambda

Storage:
• AWS Backup
• Amazon Elastic Block Store (Amazon EBS)
• Amazon Elastic File System (Amazon EFS)
• AWS Elastic Disaster Recovery
• Amazon FSx
• Amazon S3
• Amazon S3 Glacier
• AWS Storage Gateway