

ASSIGNMENT-2

Q1 Discuss the AWS and GCP terms

| Service Category | Service | AWS | Google Cloud |
|------------------|-----------------------------------|---|-----------------------------|
| Compute | IaaS | Amazon Elastic Compute Cloud | Compute Engine |
| | PaaS | AWS Elastic Beanstalk | App Engine |
| | FaaS | AWS Lambda | Cloud Functions |
| Containers | Caas | Amazon Elastic Kubernetes Service, Amazon Elastic Container Service | Google Kubernetes Engine |
| | Containers without infrastructure | AWS Fargate | Cloud Run |
| | Container registry | Amazon Elastic Container Registry | Container Registry |
| Networking | Virtual network | Amazon Virtual Private Cloud | Virtual Private Cloud |
| | Load balancer | Elastic Load Balancing | Cloud Load Balancing |
| | Dedicated interconnect | AWS Direct Connect | Cloud Interconnect |
| | Domains & DNS | Amazon Route 53 | Google Domains Cloud DNS |
| | CDN | Amazon CloudFront | Cloud CDN |

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|------------------|-------------------------------------|--|--|
| DDOS firewall | AWS shield, AWS WAF | | |
| | DDOS Firewall | AWS shield, AWS WAF | Google Cloud Armor |
| Storage | Object Storage | Amazon Simple Storage Service | Cloud Storage |
| | Block Storage | Amazon Elastic Block store | Persistent Disk |
| | Reduced- availability storage | Amazon S3 Standard - Infrequent Access Amazon S3 One Zone - Infrequent Access | Cloud storage Nearline and Cloud storage coldline |
| | Archival Storage | Amazon Glacier | Cloud Storage Archive |
| | File Storage | Amazon Elastic File System | Filestore |
| | In-memory data store | Amazon Elastic Cache for Redis | Memorystore |
| Database | RDBMS | Amazon Relational Database Service, Amazon Aurora | Cloud SQL, Cloud Spanner |
| | NoSQL: Key-Value | Amazon DynamoDB | Filestore, Cloud Bigtable |
| | NoSQL: Indexed | Amazon SimpleDB | Filestore |
| | In-memory data store | Amazon Elastic Cache for Redis | Memorystore |

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|---------------------|------------------------|---|------------------------------------|
| Data analytics | Data Warehouse | Amazon Redshift | BigQuery |
| | Query service | Amazon Athena | BigQuery |
| | Messaging | Amazon Simple Notification Service, Amazon Simple Queue Service | Pub/Sub |
| | Batch data processing | Amazon Elastic MapReduce, AWS Batch | Dataproc, Dataflow |
| | Stream data processing | Amazon Kinesis | Dataflow |
| | Stream data ingest | Amazon Kinesis | Pub/Sub |
| | Workflow Orchestration | Amazon Data Pipeline, AWS Glue | Cloud Composer |
| Management tools | Deployment | AWS CloudFormation | Cloud Deployment Manager |
| | Cost Management | AWS Budgets | Cost Management |
| Operations | Monitoring | Amazon CloudWatch | Cloud Monitoring |
| | Logging | Amazon CloudWatch Logs | Cloud Logging |
| | Audit logging | AWS CloudTrail | Cloud Audit Logs |
| | Debugging | AWS X-Ray | Cloud Debugger |
| | Performance | AWS X-Ray | Cloud Trace |
| | Tracing | | |
| Security & Identity | IAM | Amazon Identity and Access Management | Cloud Identity & Access Management |
| | Secret management | AWS Secret Manager | Secret Manager |

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Encrypted
KeysAWS Key Management
ServiceCloud Key
Management ServiceResource
monitoring

AWS Config

Cloud Asset
InventoryVulnerability
scanning

Amazon Inspector

Web Security
ScannerThreat
Detection

Amazon Guard Duty

Event Threat
Detection (beta)Microsoft
Active
Directory

AWS Directory Service

Managed Service
for Microsoft
Active DirectoryMachine
Learning

Speech

Amazon Transcribe

Speech-to-Text

Vision

Amazon Rekognition

Cloud Vision

Natural

Language
Processing

Amazon Comprehend

Cloud Natural
Language API

Translate

Amazon Translate

Cloud Translation

Video

Amazon Rekognition

Video Intelligence
API

Intelligence

Video

Conversational
Interface

Amazon Lex

Dialogflow Enterprise
EditionFully managed
ML

Amazon SageMaker

AI Platform

Internet of
Things

IoT Services

Amazon IOT

Cloud IOT