• Expert in using Amazon AWS Cloud services like**:**

**1. EC2**

**2.**  **S3**

**3. EBS**

**4. VPC**

**5. ELB**

**6. Security Groups**

**7. AMI**

**8.** **RDS**

**9. IAM,**

**10.** **Route 53**

**11. Auto scaling**

**12. Cloud Front**

**13.** **Cloud Watch**

**14.** **Cloud Trail**

**15. Cloud Formation**

**16.** **SNS.**

EC2:

1. **Compute:**

**EC2**

**EC2 Container service**

**Elastic Beanstalk (EBS)**

**Lambda**

**LightSail**

Compute:

**EC2:** Elastic Compute Cloud. Virtual Servers in the cloud. Popular service of AWS, virtualization concept.

Explanation: EC2 is very popular concept of AWS. Its heavily depends on Virtualization concept. These are the virtual server on the cloud. We get to spin up, we get to scale up and down between new virtual servers just in few seconds.

We can launch our own server instance and we can choose our version, we get choose our memory parameters and so on.

**EC2 Container Service**: Run and manage Docker (container virtualization) containers.

This is EC2 which is configured for Docker.

Explanation: Docker is a popular service which is using container virtual concept. To manage and run Docker we have Docker containers .this is offered from EC2 container service.

**Elastic Beanstalk (EBS): Run and manage web apps. For developer, just upload code and Amazon does the validation and provisions resources for that requirement.**

**Lambda: Run and code without thinking/worrying about the servers. One of the powerful and expanding area AWS.**

**Explanation: Run the code without thinking about servers, infra structure, underlined servers or anything.**

**Just Write the code and submit it to the AWS.**

**Lambda is a server less architecture. Only when the code is running, we will be charged only for the code execution time.**

**LightSail: Launch and manage virtual private servers, new offering introduced in 2016, reinvent.**

**Storage: S3**

**EFS (Elastic File System)**

**Glacier**

**Storage Gateway**

**S3: Simple Storage Service: Scalable storage in the cloud. Secure and highly scalable. Pay for what you use.**

**Object based Storage is imp topic.**

**S3 is Object based storage that means we get to store your flat files, that means we cannot install the software’s and we cannot install anything on that. Think about it is like a drop box service facility that is running on S3 model.**

**We can store unlimited data on S3.**

**Elastic File System: Fully managed file system for EC2 instances. Block level storage. Think of it as NAS in thr cloud for many EC2 (Shared).**

**Explanation: (EFS): It is fully managed File System for EC2 instances.**

**Under Compute category, EC2 is Virtual servers on the cloud.**

**EFS is a dedicated storage for EC2 instances. But unlike S3, it is block level storage.**

**NAS: Network Area Storage which is usually used in Offices, EFS is something like that.**

**So, this EFS is an alternative of NAS. We can connect one EFS to multiple EC2 instances. Basically this is the storage for EC2 instances.**

**Glacier: File archival place, data access takes 2-4 Hours retrieval time. Used as for backup. Secure and low cost storage option for data archive and longtime backup.**

**Explanation: Glacier: this is file archival.**

**Primary reason for this is for data backup. Once we put our data to Glacier or archive. To retrieve that data back, it takes up to 2 to 4 hours. So, in the retrieval time there is a delay but it is very low cost when compared to S3 or EFS. This is one of the secure and low cost for data archival. If we are planning to take up long time backup this is the best option.**

**Storage Gateway: Hybrid Storage integration.**

**The AWS Storage Gateway is a service connecting on –premises software appliance with cloud-based storage to provide seamless and secure integration between an organization’s on-premises IT environment and AWS’s storage infrastructure.**

**Explanation:**

**Hybrid Storage integration means we**

**Content and Network delivery:**

**VPC**

**Direct content**

**Route 53**

**Database:**

**RDS**

**Dynamo DB**

**Elastic Cache**

**RedShift**

**Security, Identity & Compliance:**

**IAM**

**Inspector**

**WAF & Shield**

**Certificate Manager**

**Compliance Reports**

**Directory Services**

**Management Tools:**

**Cloud Watch**

**Cloud Formation**

**Cloud trail**

**Config**

**Ops Work**

**Service Catalogue**

**Trusted Advisor**

**Messaging:**

**SES**

**SQS**

**SNS**

**Cloud Front**

**ELB**

**Security Group**

**AMI**

**Auto Scaling**