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**T.C ISTANBUL AYDIN UNIVERSITY**

**Faculty of Engineering**

**(COMPUTER ENGINEERING)**

**SEN421 CLOUD ARCHITECTURE AND SERVICES**

**Homework**

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**Prof. Dr. ALİ OKATAN**

**Prepared by**

**OBAID MOGHIZIL - B1905.010064**

**First Question: Investigate the cloud services well known?**

**The Answer: 1 - Amazon Web Services (AWS): AWS is the leading cloud computing platform, offering a wide range of services including computing, storage, networking, databases, analytics, machine learning, and artificial intelligence. AWS is used by businesses of all sizes, from startups to Fortune 500 companies, to power their websites, applications, and other IT infrastructure.2 - Microsoft Azure: Azure is Microsoft's cloud computing platform, offering a similar range of services to AWS. Azure is also used by businesses of all sizes, and is particularly popular among enterprises that already use other Microsoft products and services.3 - Google Cloud Platform (GCP): GCP is Google's cloud computing platform, offering a similar range of services to AWS and Azure. GCP is known for its innovative machine learning and AI capabilities, and is popular among businesses that are developing and deploying AI-powered applications.4 - Alibaba Cloud: Alibaba Cloud is the leading cloud computing platform in China, and is also gaining popularity in other parts of the world. Alibaba Cloud offers a wide range of services, similar to AWS, Azure, and GCP.5 - Oracle Cloud Infrastructure (OCI): OCI is Oracle's cloud computing platform, offering a wide range of services, including computing, storage, networking, databases, analytics, and machine learning. OCI is particularly popular among businesses that already use Oracle software and hardware.6 - IBM Cloud: IBM Cloud is IBM's cloud computing platform, offering a wide range of services, including computing, storage, networking, databases, analytics, and machine learning. IBM Cloud is known for its focus on security and compliance, and is popular among businesses in regulated industries.7 - Tencent Cloud: Tencent Cloud is the leading cloud computing platform in China, and is also gaining popularity in other parts of the world. Tencent Cloud offers a wide range of services, similar to AWS, Azure, and GCP.8 - OVHcloud: OVHcloud is a European cloud computing provider, offering a wide range of services, including computing, storage, networking, databases, and analytics. OVHcloud is popular among businesses that are looking for a cloud provider with a strong focus on data sovereignty.9 - DigitalOcean: DigitalOcean is a cloud computing provider that is focused on simplicity and affordability. DigitalOcean offers a wide range of services, including computing, storage, networking, and databases. DigitalOcean is popular among startups and small businesses.10 - Linode: Linode is a cloud computing provider that is similar to DigitalOcean, offering a wide range of services, including computing, storage, networking, and databases. Linode is known for its focus on performance and reliability.**

**Second Question: Write the advantages and disadvantages cloud services?**

**The Answer: Advantages of Cloud Services:**

**1 - Scalability: Cloud services are highly scalable, meaning that businesses can easily add or remove resources as needed. This is especially beneficial for businesses that experience seasonal fluctuations in demand.**

**2 - Agility: Cloud services can help businesses to be more agile and responsive to change. For example, businesses can quickly launch new applications or deploy new infrastructure without having to make a significant upfront investment.**

**3 - Cost savings: Cloud services can help businesses to save money on IT costs. For example, businesses can avoid the need to purchase and maintain their own hardware and software.**

**4 - Global reach: Cloud services are available to businesses all over the world. This can help businesses to expand into new markets and reach new customers.**

**Disadvantages of Cloud Services:**

**1 - Vendor lock-in: Businesses that become too reliant on cloud services may find it difficult to switch to a different provider in the future. This is because migrating data and applications from one cloud platform to another can be complex and expensive.**

**2 - Security and privacy concerns: Businesses that store their data in the cloud need to be careful to choose a provider that offers strong security and privacy features.**

**3 - Performance and reliability issues: Cloud services can be vulnerable to performance and reliability issues, especially during periods of high demand.**

**4 - Compliance challenges: Businesses that operate in regulated industries need to ensure that their cloud provider is compliant with all applicable regulations.**

**Third Question: Do you use cloud services. If so to what extend?**

**The Answer: Do I Use Cloud Services?**

**Yes, I use cloud services extensively. I am hosted on Google Cloud Platform, and I use a variety of Google Cloud services, including Compute Engine, Cloud Storage, and BigQuery. I also use other cloud services, such as Amazon Web Services and Microsoft Azure, for specific tasks.Using cloud services allows me to be more scalable, agile, and cost-effective. It also allows me to access the latest and greatest technologies without having to make a significant upfront investment.**