2023

Question 2

1) High reliability typically contributes to high availability. a highly reliable system typically has higher ~~level~~ availability because it fails less often and thus requires less downtime for repair

2) openness can enhance scalability by facilitating easier integration and expansion of resources

3) cloud computing can be considered a form of utility computing as it Provides metered services over the internet

4) IoT generates big data, fog computing Processes this data locally to manage it more efficiently before sending it to cloud or big data platforms

5) Hyperid cloud can be a form of multi cloud When it involves multiple cloud services
Public

Question 3

[1]

| Windows Azure | google APP Engine |

[1] Both are Pass commercial service

[2] Both offer scalability, allowing app to scale on demand

[3] they support multiple Programming languages and FrameWorks

azure integrates deeply With Microsoft Products and services like sql ~~database~~ Server	integrates with google cloud Services and APIs
offers a border range of deployment options	focuses on Providing a fully managed enviroment For Web APPS

[4]   cloudlet   Fog coumputing

[1] Both bring computational resources closer to end
users &, reduce latency

[2] Both aim to support real time or near real time
apps by minimizing the distance data must
travel

cloudlet	Fog coumputing
- Small Scale and Focused on mobile users' needs	- encompasses a border range of apps across different tires
- Single tire, Small Scale cloud data centers	- include multiple tires, each with distinct roles in data Processing and managment
- specifically address user mobility With UM handoff	- focuses on the hierarchical distribution of computing resources Without explict mobility

[3]

Page Fault	Dirty Pages
occrus when VM trying to access Page at the target in memory transfer and the Page hasnot Yet be transfered	Pages changed While VM live migration
triggered by memory access operations when required data is not in RAM	are Flagged during copy it

[1] Both are related to memory management in VM
[2] they invlue the handling of Pages in virtual memory system

[4]

Full	Para
-No host os	-Host os exist
-sits directly on top of hardWare bare	-Run on traditional os as other Processes
-called baremetal	-Hosted hypervisor

- they abstract the hardWare to ProVide isolated enviroments for different os

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5

Data locality

- make the next data that the Processor will need very close to it

- Arrange the storage to increase cPu locality

computing locality

- refers to the concept of Processing data as close to its source or destination as Possible

- Both aims to optimize Performance and efficiency in computing systems