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COEN 241
B3

1) Simple Questions

a) What is the major difference between Web 1.0 and Web 2.0?

In Web 1.0, there is limited interaction between sites and web users. Websites are static and mainly used to display information for the user to read. In Web 2.0, there is interaction between web users and sites. Websites not only display information for the user to read, but also give them the ability to write and publish data. An example of a Web 2.0 application would be Instagram.

b) Arrange the following in increasing order of scalability: a) cloud, b) cluster, c) grid, d) NUMA, e) P2P, and f) SMP.

SMP, NUMA, cloud, cluster, grid, P2P

c) A supercomputer system is equipped with 14,336 six-core Xeon E5540/E5450 processors running 2.93 GHz with 4 threads each core, and 7,168 NVIDIA Tesla M2050s, each with 448 CUDA cores running 1.15 GHz. What is total computing power in PFlops? Where 1 Peta = 1015.

$$\frac{(14336 * 6 * 2.93 * 4) + (7168 * 448 * 1.15)}{1015} = 4631.58$$

4631.58 PFlops

2) Which of the following is software as a service (SaaS), platform as a service (PaaS), or infrastructure as a service (IaaS)? a) storage as service, b) communication as a service, c) gain access to operational and development environment directly, d) instance as a service, e) gain access to servers directly, f) deploy user-built applications, g) gain access to database directly, h) run software on web browser.

a) IaaS
b) IaaS
c) PaaS
d) IaaS
e) IaaS
f) PaaS
g) IaaS
h) SaaS