## Lab 4

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## 1 QUESTION 1

What is the relationship between a guest operating system and a host operating system in a system like VMware? What factors need to be considered in choosing the host operating system?

In a system like VMware, the host operating system is the one that is natively running on the computer and that VMware is running on. On the other hand, the guest operating system is the operating system running through VMware that, through virtualization, believes it has full control over the computer's resources, but VMware actually manages the relationship between the resources the guest operating system uses on the host operating system. The main factor that has to be considered is the CPU architecture that both the host and guests are compiled to run for. Unlike emulation where the CPU architectures can be different, virtualization through VMware requires that both the host and guest operating systems are built for the same CPU architectures.