a) Name three general methods for passing parameters to the operating system.
    i) These Parameters are passed by directly inputting them into registers; this is considered the simplest method. If there are more parameters than registers then the next method of putting the memory address of a block of parameters into the registers is used. In every other case parameters are pushed and popped from the stack.
b) Describe the differences between symmetric and asymmetric multiprocessing. What are three advantages and one disadvantage of multiprocessor systems?
    i) Symmetric multiprocessing is when multiple identical processors work in tandem each with access to main memory. Asymmetric on the other hand is when one processor is in control of all the other processors. Multiprocessing is a more reliable design as if one processor fails the entire system will not fail with it. Multiprocessing also has an increased throughput from the multiple processors running. These systems are also more economical from allowing multiple processors to access the same memory, and peripherals. The primary disadvantage of multiprocessing is the increased complexity in scheduling and resource management.
c) What is the main advantage of the microkernel approach to system design? How do user programs and system services interact in a microkernel architecture? What are the disadvantages of using the microkernel
    i) Microkernels focus on moving as much from the kernel to the user as it can. This allows for improved security and reliability due to less code being run in kernel mode. The primary downside to microkernel systems is the increased overhead causing performance issues.
d)
    i) A clustered system **gathers multiple CPUs together to accomplish computational work**
    ii) D) system mode, supervisor mode, and privileged mode are all terms referring to kernel mode.
    iii) A **command interpreter** is an example of a systems program.
    iv) If a program terminates abnormally, a dump of memory may be examined by a **debugger** to determine the cause of the problem
    v) A boot block **typically only knows the location and length of the rest of the bootstrap program.**