Interrupt vector is an OS data structure indexed by interrupt address and pointing to the interrupt handlers. It holds the addresses of the interrupt service routine for the various devices.

The one program of an operating system running at all times on the computer is the kernel. Everything else is either a system program or an application program.

Interrupt vector is an OS data structure indexed by interrupt address and pointing to the interrupt handlers. It holds the addresses of the interrupt service routine for the various devices.

A command interpreter, usually called shell in UNIX systems, is a special program to get and execute the next user-specified command either built-in or named to an executable file.

Emulator simulates computer hardware in software and is typically used when the source CPU type is different from the target CPU type.

A system service that combines relocatable object files into a single binary executable file is called linker.

Exception is a software-generated interrupt caused by an error such as division by zero or invalid memory access.

Which of the following information defined in C is allocated in stack at runtime? (A) Arguments for a function call (B) Static local variables (C) Static global variables (D) Dynamically allocated memory

What does OS typically have for each device controller that understands the device controller and presents a uniform interface to the device to the rest of the OS? (A) API (B) System Calls (C) Interrupt Vector (D) Device Driver

Which is NOT one of the major categories of system calls? (A) Process control (B) Security (C) Communications (D) File access

The state when the process is waiting to be assigned to a processor is called (A) New (B) Waiting (C) Ready (D) Running

Multiprogramming increases CPU utilization by organizing jobs so several jobs are kept in memory simultaneously, and CPU always has one to execute by switching to

another job when the running job needs to wait.

he bootstrap program (with BIOS) is loaded at power-up or reboot. It is typically stored in ROM or EEPROM, generally known as firmware.

Which kind of computer systems is usually interconnected by networks rather than local bus or local switching? (A) personal computer system (B) multi-core design (C) cluster system (D) symmetric multiprocessing architecture

Which simulates computer hardware in software, is typically used when the source CPU type is different from the target CPU type? (A) Virtual Machine Manager (B) Emulator (C) Container (D) Hypervisor

Which of the following statements is NOT true? (A) Modern operating systems are interrupt-driven. (B) Time-sharing increases CPU utilization by making CPU busier. (C) The hardware allows privileged instructions to be executed in user mode. (D) Dual-mode operation allows OS to protect itself and other system components.

Which type of resources managed by OS allows a device controller to transfer blocks of data from buffer storage directly to main memory without CPU intervention? (A) IRQ (B) I/O ports (C) Memory space (D) DMA

A monolithic structure for organizing an operating system places all of the functionality of the system into a single, static binary file that runs in a single address space.

The array of addresses is indexed by a unique number, given with the interrupt request, to provide the address of the interrupt service routine for the interrupting device.

The initial bootstrap program for a computer to start running is typically stored in (A) Cache (B) SRAM (C) DRAM (D) ROM

A system service that combines relocatable object files into a single binary executable file is called (A) Compiler (B) Linker (C) Loader (D) Bootstrap program

Timesharing or multitasking is logical extension in which CPU switches jobs so frequently that users can interact with each job while it is running, creating interactive computing.