System call

A system call is a programming interface provided by an operating system that allows applications to request services from the kernel. The system call provides a way for an application to interact with the underlying hardware and resources of the computer system.

There are several types of system calls that are provided by an operating system, including:

- 1. Process Control System Calls: These system calls are used to create, manage, and terminate processes in the system. Examples of process control system calls include fork(), exec(), wait(), and exit().
- 2. File Management System Calls: These system calls are used to manage files and directories on the file system. Examples of file management system calls include open(), close(), read(), write(), mkdir(), and rmdir().
- 3. Device Management System Calls: These system calls are used to manage input/output devices in the system. Examples of device management system calls include ioctl(), read(), and write().
- 4. Information Maintenance System Calls: These system calls are used to get or set system and process information. Examples of information maintenance system calls include getpid(), getuid(), getgid(), and time().
- 5. Interprocess Communication System Calls: These system calls are used to enable communication and synchronization between processes in the system. Examples of interprocess communication system calls include pipe(), shmget(), and semget().

6. Network System Calls: These system calls are used to manage network connections and data transfer over a network. Examples of network system calls include socket(), bind(), and listen().

Related Posts:

- 1. Operating System: A List of Video Lectures RGPV Notes
- 2. GATE, Context switch calculation in SRTF algorithm | Prof. Jayesh Umre
- 3. Introduction to Operating Systems
- 4. Different Types of OS
- 5. Characteristics and features of an OS
- 6. Operating sytems services
- 7. System Calls in OS
- 8. File Systems
- 9. How many page faults
- 10. Process State Diagram
- 11. Operating System Scheduler
- 12. FIFO page replacement algorithm
- 13. LRU page replacement algorithms
- 14. Optimal page replacement algorithm
- 15. SRTF shortest remaining time first
- 16. OS 4
- 17. OS 3
- 18. Os 2
- 19. Os 1
- 20. CBSE NET 2004 38
- 21. Cbse net 2004 37
- 22. Cbse net 2004

- 23. CBSE Net 2017
- 24. Ugc net 2017 solved
- 25. NET 4
- 26. NET 1
- 27. Net 28
- 28. Net 26
- 29. Net 50
- 30. Net 49
- 31. Net 48
- 32. Net 46
- 33. Net 44
- 34. Net 40
- 35. Net 39
- 36. GATE, Longest Remaining Time First Algorithm | Prof. Jayesh Umre
- 37. GATE SRTF | What is the total waiting time for process P2?
- 38. GATE Calculate Total Waiting Time SRTF algorithm | Prof. Jayesh Umre
- 39. Memory management
- 40. Concept of Threads
- 41. Process concept
- 42. Directory Structure OS
- 43. Contiguous disk space allocation method
- 44. File systems
- 45. Types of os
- 46. Evolution of os
- 47. Functions of os
- 48. Why is operating system a mandatory software?
- 49. Bankers algorithm problems

- 50. Diploma Linux Unit 3
- 51. RGPV Diploma Linnux Unit 2
- 52. Program to print string in reverse order
- 53. Program to implement while loop in Linux
- 54. Program to implement for loop using sequence keyword in Liux
- 55. Program to implement different types of increment in Linux
- 56. For loop without in keyword in Linux
- 57. Program to implement for loop using in keyword in Linux
- 58. Multiple Processor Scheduling
- 59. What do you mean by Virtual Memory? Write down its advantages?
- 60. Compare Paging and Segmentation?
- 61. What is Process Scheduling, CPU Scheduling, Disk Scheduling? Explain Short, Medium and Long term Scheduler?
- 62. Explain concept of a process with its components?
- 63. Explain the following in brief Contiguous and Linked list allocation for implementing file system?
- 64. Explain various Disk scheduling algorithms with Illustrations?
- 65. Define process and thread. What is PCB ? Explain its various entries with their usefulness ?
- 66. Discuss advantages and disadvantages of the Buffer cache?
- 67. Explain different types of OS with examples of each?
- 68. What is an Operating System? Write down its desirable characteristics?
- 69. Define a deadlock? Write down the conditions responsible for deadlock? How can we recover from deadlock?
- 70. What are the various services provided by Operating system?
- 71. What do you mean by PCB? Where is it used? What are its contents? Explain.
- 72. What is Binary and Counting semaphores?

- 73. What is File? What are the different File attribute and operations?
- 74. Describe necessary conditions for deadlocks situation to arise.
- 75. What are points to be consider in file system design? Explain linked list allocation in detail?
- 76. Write a Semaphore solution for dining Philosopher's problem?
- 77. Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5.

 How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU
- 78. Explain CPU schedulers in operating system?
- 79. Write the different state of a process with the help of Process state deagram?
- 80. What is Mutex in operating system?
- 81. Explain Network operating system?
- 82. What do you mean by paging in operating system?