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10. multiple choice question

10.shorts answers

7. problem solve( May include writing code/debugging)

1. Basic concepts of file systems
   1. bash
   2. file system layout
   3. unix permission
   4. basic commands
   5. man pages
   6. emacs - commands
2. Shell scripting
   1. Pipelines
   2. Redirections
   3. Interpreted language concepts
   4. use of shell scripts
   5. writing shell scripts
3. regular expressions
   1. unix wildcards
   2. standard regular expressions
   3. string matching using regular expressions
   4. use of regular expressions in bash commands and shell scripts
4. Python scripts
   1. python basics
   2. comparison among python, java, and c/c++
   3. writing sample python scripts
   4. use regular expression in python scripts
5. C programming
   1. writing simple c programs
   2. compile and debug c programs
   3. libtrary calls vs system calls
   4. advantage of the buffers
6. Debugging and compilation concepts and tools
   1. makefile concepts
   2. linking and compiling
   3. daynamic linking with gcc
   4. debugging with dgg
7. 6) Parallelism and multiprocessing
   1. concepts of parallelism
   2. embarrassingly parallel vs inherently sequential
   3. multiprocessing vs multithreading vs multitasking
   4. POSIX threads
   5. Synchronization
   6. massive parallelisms (types and difference)
   7. Parallel programming tools (open CL, Open MP)
8. Security Concepts
   1. Type of threds
   2. authentication vs authorization
   3. chain of trust
   4. firewalls and
9. version controls
   1. git concepts
   2. basic git opertiaons
   3. diff
   4. patch
   5. reason to use git
   6. pathc
   7. subversion and CVS