

## ***Midterm exam 2 sample solution paper test***

1. A symbolic link is an indirect pointer to a file, which pointed directly to the i-node of the file. Symbolic link does not have file system limitations on a symbolic link and what it points to, and anyone can create a symbolic link to a directory. Symbolic links were introduced to get around the limitations of hard links.
2. True, False, False
3. No. Pssswd will switch to root user by setuid()
4. No. There is no reverse function can be found in SHA-512 algorithm, which helps increase the security. (can not be reversed, one-way hash function)
5. "ptr" points to a local variable val, which can not be referenced after the if block.
6. version A: 1,2,3  
version B: 101, 102, 103
7. PID is process ID  
PPID is parent process ID  
PGID is process group ID  
over Internet