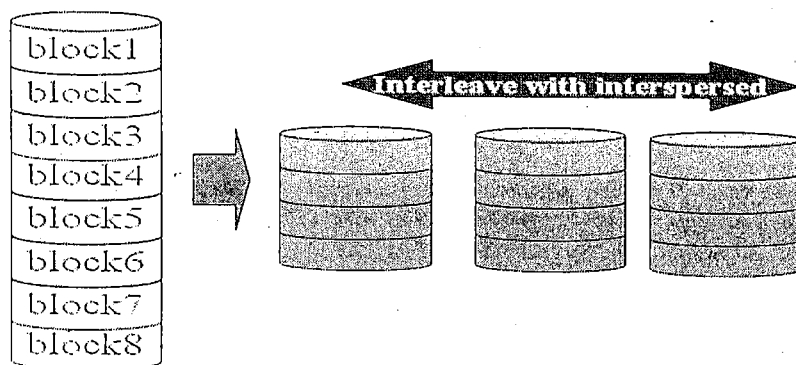


參考用

1. For Redundant Array of Independent Disks(RAID), please describe RAID 5 and its features in terms of Min disks required, Available disk capacity, Manual or automatic fault tolerance(10%)  
Please also allocate the 8 blocks of the left side into RAID5 system of the right side in the following: (10%)



2. In virtual memory system, page faults affect performance. Dynamic Paging Algorithm is employed to use memory efficiently and allocates page frames in different way to reduce the number of page faults. If there are only 3 pages space in the memory and the sequence of page demands is as below:
- 0 1 2 3 0 1 2 3 0 1 2 3 4
- What is the minimum number of page faults? (10%)
  - If the replacement algorithm “Least Recently Used First” is employed, what is the number of page faults? Please employ the algorithm “Least Recently Used First” to complete the following and what is the number of page faults obtained? (10%)

Page frame	0	1	2	3	0	1	2	3	0	1	2	3	4
0		0*	0	0	3*								
1			1*	1	1								
2				2*	2								

\*: page fault

- Please describe the two protocols, Real-time Transport Protocol (RTP) and RTP Control Protocol (RTCP). What are their applications in multimedia communication? (15%)
- Please compare two operating systems, Android and iOS and describe their strengths and weakness (15%)

注意：背面有試題

國立中央大學102學年度碩士班考試入學試題卷

所別：網路學習科技研究所碩士班 不分組(一般生) 科目：作業系統 共二頁 第二頁

本科考試禁用計算器

\*請在試卷答案卷(卡)內作答

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5. Please describe the following terminologies in details: (30%)
- i. Android (operating system) ( 6%)
  - ii. LTE( Long Term Evolution) ( 6%)
  - iii. Zigbee protocol( 6%)
  - iv. Domain Name Service ( 6%)
  - v. NTFS (New Technology File System) ( 6%)

注意：背面有試題