

1. Here are two file allocation methods, answer the following questions.

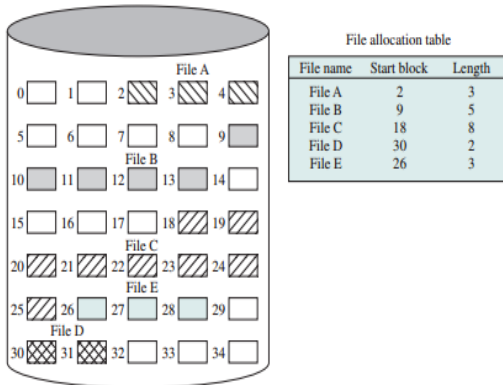


Fig 1

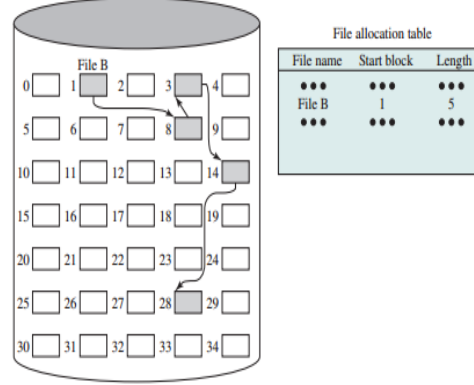


Fig 2

- 1) Compared with Fig 2, the method in Fig 1 has a **major problem**. What is that and why it can be avoided in Fig 2.
- 2) Briefly list the advantages and disadvantages of these two methods.
- 3) What is **internal fragmentation**, where will it happen?

2. Here are two types of indexed allocation, what is the difference between these two methods?

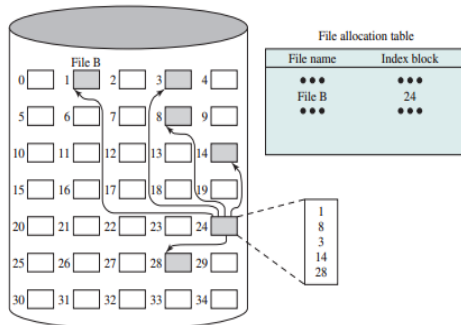


Fig 3

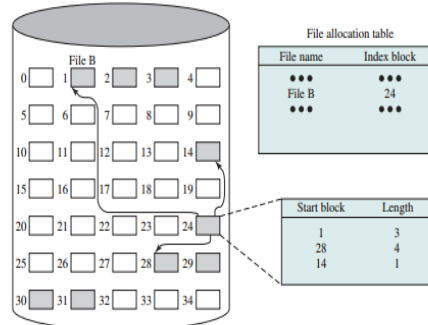


Fig 4

3. What is **Bit Table**, how does it work? In your opinion, where shall we store the bit table (main memory or disk)? List your reason.
4. Does different **block size** impact internal fragmentation, or external fragmentation? Compare the advantages and disadvantages of different block size.
5. What abbreviations **FAT** and **FST** stand for? What is the purpose of each of the tables?