

QW2-1

(a) Each block contains 3 records.

First block has record 0 to record 2, second block has record 3 to record 5, third block has record 6 to record 8, fourth block has record 9 to 11.

So, $id = 76766$ (record 9) is in block-4.

(Ans:)

(b) In order to execute above query, the head must come to block-4. At first, it requires 1 seek to come from track 1000 to 0. Then, four block transfers occur for it to reach the $id = 98345$ record.

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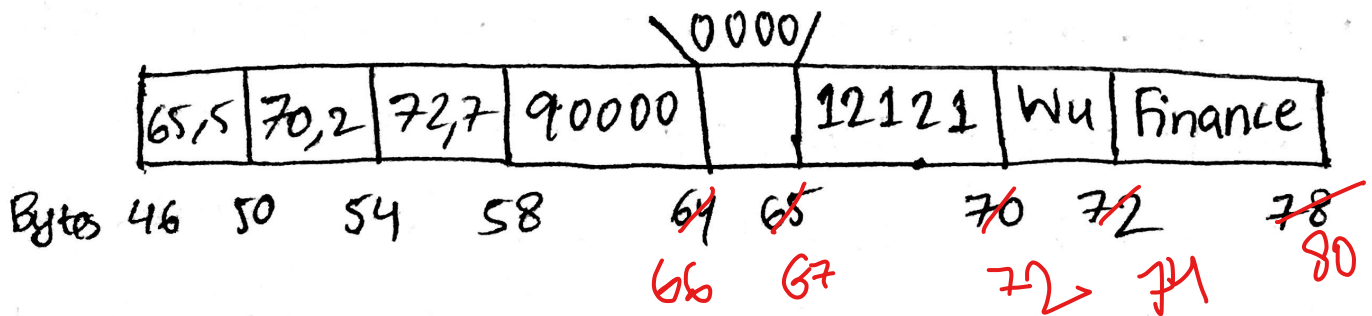
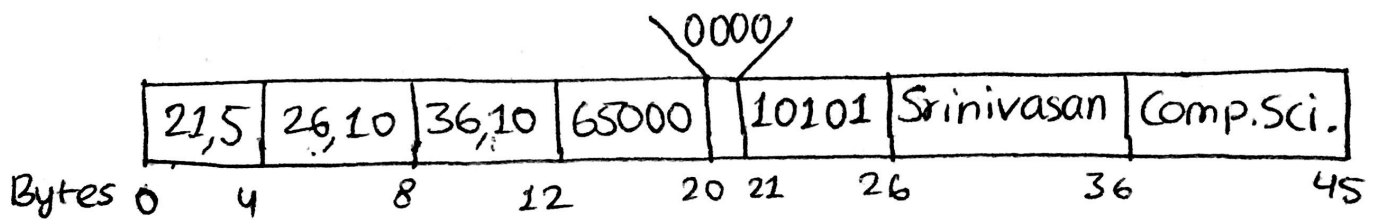
(c) Here,

No. of block transfers = 4.

No. of seek = 1.

(Ans.)

QW2-2



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QW2-3

(a)

3	400	100	80		80	100	400
3516	4096	3696	3616				

(b) Delete last record: No of entries in block header decreases by 1 and end of free space advances to the right by size of last record.

Delete first record: No. of entries in block header decreases by 1. All the other entries advance to the right by the amount equal to size of first record.

Delete any other record:

No. of entries in block header decreases by 1. All the records located after deleted record advance towards the right by the amount equal to size of deleted record.

QW2-4

The relation name is a primary key in the relation metadata. So, no duplicate table name is allowed when a previously used table name is used in create statement. The same occurs for views as a view name is primary key in view metadata.

An attribute/index is a primary key along with table name in index/attribute metadata. So, no duplicates are allowed.