



Personal Institut Teknologi Bandung

https://edunex.itb.ac.id/exam/18245/start

Acer IF SPARTA HMF WISOKO HMF 24

0:29:33 Latihan Storage and File Structure

Question Numbers 3 / 8 38 %

Manakah yang benar terkait performance measure dari disk.  
Which are correct regarding the performance measure of a disk?

- ☒ Data transfer rate adalah rate data ditransfer/diambil dari/ke disk.  
Data transfer rate is the rate at which data is transferred/stored from/to the disk.
- ☒ Rotational latency adalah waktu yang dibutuhkan untuk sektor yang akan diakses muncul di bawah head dari lengan disk.  
Rotational latency is the time it takes for the sector to be accessed to appear under the head of the disk arm.
- ☐ Access time adalah waktu yang dibutuhkan untuk memposisikan lengan disk ke track yang tepat.  
Access time is the time required to position the disk arm to the correct track.
- ☐ MTTF bertambah dengan bertambahnya umur disk.  
MTTF increases with the age of the disk.

Exam Info

Server Time: Fri, 20 Sept 2024 24:47

Lecturer: Triya Esterina Widagdo, STAM.Sc.

Course: IF3140 - Database System [Parent Class]

Exam Type: Quiz

Can Go Back: Yes

Show Score: No

Show Solution: No

21°C Barawan

00:47 20/09/2024

Personal Institut Teknologi Bandung

https://edunex.itb.ac.id/exam/18245/start

Acer IF SPARTA HMF WISOKO HMF 24

0:29:25 Latihan Storage and File Structure

Question Numbers 4 / 8 50 %

Manakah yang merupakan teknik untuk melakukan optimisasi terhadap disk block access.  
Which is a technique for optimizing disk block access?

- ☒ Buffering of blocks
- ☒ File organization
- ☒ Pemanfaatan NVRAM dan log disk untuk mempercepat write ke database  
Utilizing NVRAM and disk logs to speed up writes to the database
- ☐ Efficient searching algorithm

Exam Info

Server Time: Fri, 20 Sept 2024 24:47

Lecturer: Triya Esterina Widagdo, STAM.Sc.

Course: IF3140 - Database System [Parent Class]

Exam Type: Quiz

Can Go Back: Yes

Show Score: No

Show Solution: No

21°C Barawan

00:47 20/09/2024

Personal

Institut Teknologi Bandung

https://edunex.itb.ac.id/exam/18245/start

AcerIFSPARTAHMIFWSOKTO HMIF 24

0:29:18Latihan Storage and File Structure

Help Info

Question Numbers

5 / 8

63 %

Exam Info

Server Time

Fri, 20 Sept 2024

24:47

Lecturer

Tricya Esterina Widagdo, STM.Sc.

Course

IF3140 - Database System [Parent Class]

Exam Type

Quiz

Can Go Back

Yes

Show Score

No

Show Solution

No

Manakah yang benar terkait disk block access.  
Which is correct regarding disk block access?

☒ Akses ke data di disk lebih lambat daripada akses data di main memory karena teknologi disk bersifat mekanis, sementara teknologi main memory bersifat elektronik.  
Access to data on the disk is slower than access to data in main memory because disk technology is mechanical, while main memory technology is electronic.

☐ Akses ke data di disk lebih cepat daripada akses data di main memory karena teknologi disk bersifat mekanis, sementara teknologi main memory bersifat elektronik.  
Access to data on the disk is faster than access to data in main memory because disk technology is mechanical, while main memory technology is electronic.

☐ Sebuah file database dipartisi menjadi unit-unit yang disebut block. Satu block dapat hanya dapat menyimpan 1 buah record.  
A database file is partitioned into units called blocks. One block can only store 1 record.

☒ Sebuah file database dipartisi menjadi unit-unit yang disebut block. Satu block dapat menyimpan lebih dari 1 record.  
A database file is partitioned into units called blocks. One block can store more than 1 record.

Back

Next Question

21°C  
Barawan

Search

00:47  
20/09/2024

Personal

Institut Teknologi Bandung

https://edunex.itb.ac.id/exam/18245/start

AcerIFSPARTAHMIFWSOKTO HMIF 24

0:29:11Latihan Storage and File Structure

Help Info

Question Numbers

6 / 8

75 %

Exam Info

Server Time

Fri, 20 Sept 2024

24:48

Lecturer

Tricya Esterina Widagdo, STM.Sc.

Course

IF3140 - Database System [Parent Class]

Exam Type

Quiz

Can Go Back

Yes

Show Score

No

Show Solution

No

Sebuah file menampung record-record dengan ukuran fixed yang disimpan di secondary storage dengan menggunakan unspanned blocking. Apabila ukuran setiap record adalah 102 bytes dan ukuran setiap block adalah 4 kB (1 kB = 1024 bytes), record ke-175 berada pada blok ke- <A> dan disimpan mulai bytes ke- <B> pada block tersebut. Asumsi: penomoran record, block, dan bytes pada block dimulai dari 0.  
Manakah nilai yang tepat untuk A dan B.

A file holds fixed size records stored in secondary storage using unspanned blocking. If the size of each record is 102 bytes and the size of each block is 4 kB (1 kB = 1024 bytes), the 175th record is in the <A> block and is stored starting from the <B> bytes in that block. Assumption: the numbering of records, blocks, and bytes in a block starts from 0.

☐ A: 4; B = 1428

☒ A: 4; B = 1530

☐ A: 3; B = 1428

☐ A: 3; B = 1530

Back

Next Question

21°C  
Barawan

Search

00:48  
20/09/2024

Personal Institut Teknologi Bandung

https://edunex.itb.ac.id/exam/18245/start

Acer IF SPARTA HMIF WISOKO HMIF 24

0:29:4 Latihan Storage and File Structure

Question Numbers

7 / 8 88 %

Pasangan pilihan organisasi file berikut ini dengan aturan penempatan record pada file yang sesuai adalah:  
Which rule for placing records in a file is in accordance with its file organization?

- ☐ Heap file organization - Record record ditempatkan pada file secara teratur berdasarkan atribut yang dipilih sebagai kunci pencarian (search key).  
Heap file organization - Records are placed in the file in order based on the attribute chosen as the search key.
- ☐ Sequential file organization - Record record dapat ditempatkan dimana pun pada file selama ada space kosong yang mencukupi.  
Sequential file organization - Records can be placed anywhere in the file as long as there is sufficient free space.
- ☒ Multitable clustering file organization - Record record dari sejumlah relasi atau tabel disimpan pada file yang sama; record-record yang saling terkait dari relasi-relasi tersebut ditempatkan pada blok yang sama atau berurutan.  
Multitable clustering file organization - Records from a number of relations or tables are stored in the same file; related records from these relations are placed in the same block or sequentially.
- ☒ B+-tree file organization - Record-record ditempatkan pada file secara teratur berdasarkan atribut yang dipilih sebagai kunci pencarian (search key) dengan tetap mempertahankan keterturan record walaupun banyak terjadi operasi insert, delete, atau update.  
B+-tree file organization - Records are placed in the file in order based on the attribute chosen as the search key while maintaining the order of the records even though many insert, delete, or update operations occur.

Exam Info

Server Time:  
Fri, 20 Sept 2024  
24:48

Lecturer:  
Triyca Esterina Widagdo, STM.Sc.

Courses:  
IF3140 - Database System (Parent Class)

Exam Type:  
Quiz

Can Go Back:  
Yes

Show Score:  
No

Show Solution:  
No

21°C Barawan

Q Search

00:48 20/09/2024

Personal Institut Teknologi Bandung

https://edunex.itb.ac.id/exam/18245/start

Acer IF SPARTA HMIF WISOKO HMIF 24

0:19:38 Latihan Storage and File Structure

Question Numbers

8 / 8 100 %

Manakah pernyataan yang tepat terkait organisasi file  
Which statement is correct regarding file organization?

- ☐ Hash function tidak mungkin menghasilkan value yang sama untuk nilai atribut masukan yang berbeda.  
Hash functions cannot produce the same value for different input attribute values.
- ☒ Organisasi file multitable clustering ditujukan untuk memberikan eksekusi yang efisien dari pemrosesan query yang mengandung operasi joinnatural join operations.  
Multitable clustering file organization is intended to provide efficient execution of query processing that contains joinnatural join operations.
- ☒ Organisasi file yang secara rata-rata akan memberikan kinerja terbaik dalam pengambilan record pertama yang memenuhi kondisi "=> search key" adalah hashing file organization.  
The file organization that will give the best performance on average in retrieving the first record that satisfies the "=> search key" condition is the Hashing file organization.
- ☒ Nama dari view yang terdefinisi di dalam basis data serta query pembangunan view tersebut disimpan di dalam Data Dictionary.  
The names of the views defined in the database and the queries that build these views are stored in the Data Dictionary.

Exam Info

Server Time:  
Fri, 20 Sept 2024  
24:57

Lecturer:  
Triyca Esterina Widagdo, STM.Sc.

Courses:  
IF3140 - Database System (Parent Class)

Exam Type:  
Quiz

Can Go Back:  
Yes

Show Score:  
No

Show Solution:  
No

21°C Barawan

Q Search

00:57 20/09/2024