Tuesday 21st September 2021

Exam Question Practice

Rearrange this diagram to show how the hard disk would look after a defragmentation software has been used:

B3 D3 C1 A4 E3 B4 D2 A2 E2 B2 C2 A1 D4 C3 E1 A3 B1

Would become:  
A1 A2 A3 A4 B1 B2 B3 B4 C1 C2 C3 C4 D1 D2 D3 D4 E1 E2 E3 E4

Sally and Ahmed work for a printer company. Ahmed writes the user manuals for the printers, and Sally programs the robots which build the new printers. Decide the file access for:

* New Printer Designs
* User manuals for printers on the market
* Programs to control the robots
* First drafts for a new printer’s user manual

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Read | Write | Execute | Delete |
| New Printer Designs | Sally and Ahmed | Sally | - | - |
| User manuals for printers on the market | Ahmed | Ahmed | - | - |
| Programs to control the robots | Sally | Sally | Sally | Sally |
| First drafts for a new printer’s user manual | Ahermed | Ahmed | - | Ahmed |

The Operating System (OS) manages a computer’s resources. Explain how the OS uses scheduling to share the use of the CPU between processes.

The operating system gives each process a small amount of time called a time slice. This is how long it is allowed to use the CPU. While the process waits for it’s turn, it is in the ready queue. When the process is able to use the CPU, it is moved to the running state. It begins executing instructions. When the time slice expires, the process is moved back into the ready queue. However, if the process is waiting for user input, it moves to the blocked state rather than the ready state.

A company stores sensitive statistics about it’s performance on a server. Users of the server do not all have the same level of access. What type of access should a student on work experience have to the statistics file?