Comprehensive-Mini-Notes DS 1. Complexity Questions 2. Number of leaves in a k-ary tree with n inter nal nodes 3. Infix, Prefix, Postfix 4. Sequence Containers 5. Data structure in BFS and DFS 6. Tree traversal techniques OS 1. Context switching problem 2. Memory space problems 3. FIFO Page replaceme nt Algorithm Finding page faults 4. Scheduling algorithms FCFS (First come first serve) SSTF (Shorte st seek time first) SCAN Scheduling CSCAN. In this article, we look at the problem of normalization. We also look at how to deal with conflict in a NoSQL database. We conclude with a list of rules for dealing with transactions in the database. In the next section, we'll look at a problem of how to h andle conflict in the NoSQL Database. OS is a programming language for computers. OS has a number of built-in features. OS can be used to solve problems such as context switching, memory space and FIF O. It can also be used for data structure in BFS and DFS. Semaphore starts with a value of 10. Each P operation decrements the value by 1. With 12 P operations, the value decreases by 12 (10 - 12 = -2 ). A semaphore value cannot be negative. In such cases, processes attempting a P operation would blo ck until a V operation allows them to proceed. For the final semaphore value to be 7, x (the number of V operations) must be 9. Since each V operation adds 1, we need x to be equal to 9. Pumping lemma is used to prove that given grammar is not regular. Chomsky hierarchy Type 3: Regular Grammar Type 2: Context free grammar Type 1: Context sensitive grammar DBMS. One-to-Many (1:N): This is more comm on. One author can write many books (N), but a book can only have one author (1). Many-to -Many (N:M ): Many books can have many authors (M:N) Maximum size of join = mn.