Final Year Project - explanation

- 4 Pillars  
-- Detailed explanation  
-- How can we achieve each of them?  
-- Real world examples of each  
-- Abstraction vs Encapsulation  
-- Among the two, Abstraction vs Encapsulation, is any one of them is the subset of the other one?  
-- How is Encapsulation the subset of Abstraction?  
-- How are Abstraction and Inheritance linked with each other?  
-- Types of polymorphism static and (dynamic)  
-- Overloading and Overriding

- Composition vs Aggregation vs Association  
-- Verbal explanation  
  
-- Abastract vs Interface  
-- Can an Interface be extended  
-- Example of interface extension  
-- How many abstract classes can each class extend at max?  
-- How many interfaces can each class implement at max?  
-- How many interfaces can each interface implement at max?  
-- When to use Abstract vs Interface  
-- Difference between Abstraction vs making a class Abstract  
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- String Pool & Heap  
- how do we make immutable class in java. And how its optimizations is done by jvm

Final  
-- Final Class vs Method vs Variable  
-- Difference between Final vs Finalize vs Finally

- Exception Handling in Java

predict output of exception handling on different code examples

name some subclasses of class exception  
finally block

-collection in java complexities

- why to use hash map, problems occurs in it how to resolve them an idea of how to make it more efficient then using chaining concept

binary tree

balance tree

types of normallizatioins

joins in db

types of index

--1 SQL query on emp vs dept, to display all the departments having no employees, only with Join.

-- What is a stored procedure  
-- Difference between predefined functions vs Stored procedures

critical section, mutex lock semaphore