GTCL exam Question:

1. What is UML Diagram. Write diagrams

**Ans:**

UML is a standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems.

UML was created by Object Management Group(OMG).

There are two brad categories of diagrams and then are again sub-categorises

- Structural Diagrams

- Behavioral Diagrams

**Structural Diagrams:**

-Class Diagram

-Object Diagram

-Component Diagram

-Deployment Diagram

**Behavioral Diagrams:**

-Use Case Diagram

-Sequence Diagram

-Collaboration Diagram

-Statechart Diagram

-Activity Diagram

2. Write the algorithm of Binary Search? What is the time complexity of the binary search?

3. C code to find the number 2nd max from a array?

4. Combinational Circuit? Truth table logic diagram.

5. Preorder, Inorder, Post Order tree?

6. Ip Addressing?

7. Abbreviation: BIOS, FAT,

8. Deadlock situation? Mutaual exclusion, semaphore....

9. A employee table with two field first name, last name. Find the first name, last name which last name has atleast four character and them in one line separating space.

I.e

|  |  |
| --- | --- |
| First Name | Last Name |
| Saleh | Enam |

Result: Saleh Enam

10. Query transaction with rollback and commit.

11. SDLC. Waterfall diagram.

12. In Object oriented programing what do you mean by Public, Protected and private?