**FAQ on Programming Foundation with Pseudocode**

**Lesson 2: Good Programming Practices**

* Discuss characteristics of a good program like readability, layout, meaningful variables and module names, modularity, comments
* Discuss maintainability : importance of removing hard coded constants from the program
* Discuss how to create modules : how to identify module name, how to decide what needs to be passed to a module. If many values are being passed, then decide to pass a record instead of passing many individual values. How to decide the return type from the module
* Discuss on coupling : Explain the difference between tight coupling and loose coupling
* Discuss on cohesion : Importance of cohesion
* Discuss difference between correctness and robustness
* Identify the good programming practices followed or not followed in a given pseudocode

**Lesson 5: Exception Handling**

* Discuss defensive programming and its purpose. Discuss that program cannot work only for right values entered by user.
* Discuss different techniques of defensive programming
* Discuss that meaningful messages have to be displayed when either
  + user enters wrong values ( input validation )
  + when data is being read from a file/ table and a “not found “ situation occurs . ( exception handling )
* Discuss that exception handling concept separates normal code from exception handling code. Relate this concept to pl sql or tsql exception handling
* Discuss on guidelines for creating exception handlers
  + which module should throw / raise the exception
  + which module should catch the exception

**Lesson 6: Software Testing**

* Definition and purpose of testing and debugging
* Guidelines for implementing test cases
* Discuss static and dynamic testing
* Different techniques of static and dynamic testing
* Different techniques of white box testing
* Discuss the different testing approaches
* Discuss system testing, validation testing, acceptance and regression testing