TOPIC 6	**Conditional Statements**
SUB-TOPICS	▪ logical arrays (scalars, vectors & matrices) ▪ logical operators & truth tables; short-circuiting behaviour ▪ linear indexing (selection with conditional expressions) ▪ the if statement block ▪ the if – else statement block ▪ the if – elseif – else statement block ▪ more on the disp function (displaying numerical variables with text) ▪ array input handling in scripts ▪ introduction to WHILE loops
OBJECTIVES	by the end of this unit, students should be able to: - create and read conditional expressions using logical operators - construct complex conditional expressions to select array elements meeting certain criteria - understand the relationship between linear indices and subscripts - write conditional blocks depending on the choice of action required - include conditional blocks inside nested FOR loops - construct a properly working WHILE loop, understand the role of the loop counter variable (and why it must be initialised, tested and modified)
KEY WORDS AND EXPRESSIONS	on MOLE
CORE STUDY MATERIALS	- Textbook selection - MATLAB Topic 6 Notes - Topic 6 Problems (Question Bank) - Vocabulary Lists
TEXTBOOK STUDY	**Essential Reading** Chapter 2 Fundamentals - Section 2.8 (Decisions) - Summary & Exercises Chapter 5 Logical Vectors (watch out for eps, NaN, exist, any, all, find) Chapter 8 Loops (Exercises too) **Recommended Reading** - switch-case blocks, the break and continue keywords
ADDITIONAL RESOURCES	check on MOLE