

DATA-level structures
Program – level structures
Control – level structures

Data –
Elements – numeric (int, float), char, Boolean, address (pointer), string (compound data type)
Data structures – linear (array, string, record, list), nonlinear (tree, graph), set (stack, queue)
File structures – sequential file, relational db
Storage structures

Program
Identifier
Expression
Statement
Internal functions
External functions
Modules – functions, etc.
Top down design
[reusable, efficient use of storage, efficient use of programmers,

Control
[Subprogram as operation]
Over operations (operator as function) – expressions, conditional expressions
Control over statements – control abstractions
 Simple sequence
 Selection
 Iteration – indexed loop, test-before loop, test-after loop
Control over subprograms –simple call, recursion, implicit call (exception handling, scheduled call),
parallel processing

Programming paradigms
oops