C   PDF

C C was developed by Dennis Ritchie as a systems programming language for UNIX Lexically, C is more cryptic than PASCAL For example, brackets are often used to obviate the need for keywords However, underlined characters are allowed in identifiers, which can make them more understandable. The are a number of monadic and addict (called binary) operators Some have unexpected precedence Brackets may be ignored by the compiler, with occasionally surprising results. There are shift operations Overflows on integer arithmetic may be ignored. There are some composite symbols with special meanings for example' means and then' and' means or else (called short circuit control forms invade) ' is used for equality to avoid confusion with' in assignments ' is used for inequality. They are several integer types of different sizes and there are floating point numbers pointers(C talks of indirection) arrays and structures but no Booleans or sets C is not strongly typed: for example, some compilers do not insert run-time checks on array sub-scripts, etc Type c6nversion is permissive Address arithmetic can be performed on pointers Null is demoted by a zero value. C has procedures and functions Parameters are 1ways passed by value thus for a subprogram to pirate on a given data structure, a pointer to that" ,rupture has to be passed. There are few features

(apart from procedures and functions) to support modularization- however. separate (strictly independent) compilation is al-lowed. C has often been compared to PASCAL, generally unfavorably. It may be easier to write, but certainly not to read, unless tricks are avoided and the text carefully annotated. Its main advantages arc efficiency (and it may not be significantly more efficient) and separate compilation.　　　　C　　　C　　　　　　　Dennis Ritchie　UNIX

C　PASCAL

C

‘

’　　　　‘ and then’　　　‘ ||’　　　’ or else’　　　ADA

‘　=　’

‘　=’　　　　　　‘　　’　　　　　　　C

C

C

C

C　PASCAL　　　　　　　　C

PASCAL