**FUNCTIONS**

Functions break large computing tasks into smaller ones, and enable people to build on what others have done instead of starting over from scratch. Appropriate functions hide details of operation from parts of the program that don’t need to know about them, thus clarifying the whole, and easing the pain of making changes.

C programs generally consists of many small functions rather a few big ones.

Each function definition has the form

*return-type function-name(argument declarations)*

*{*

*declarations and statements*

*}*

Various parts may be absent; a minimal function is

dummy()

{

}

which does nothing and returns nothing. If the return type is omitted, **int** is assumed. If the function takes arguments, declare them; if it takes no arguments, use **void**. Just leaving empty argument list like **()** is a bad idea.

The **return** statement is the mechanism for returning a value from the called function to its caller.

Any expression can follow return.

return *expression*;

The **expression** will be converted to the return type of the function if necessary. Parentheses are often used around the expression, but they are optional.