

## STRUCTURED TECHNIQUES

**Structured/modular programming** is an approach which often produces programs of high quality. Such programs are easy to test, debug, modify and maintain.

**Stepwise Refinement:** A programming problem is divided into its main modules. Each module is further subdivided and the refinement process is repeated until each programming module can be expressed in simple code.

### Functions

A function (subroutine) is a portion of code within a larger program that performs a specific task.

#### Function Prototypes

These tell C how the function will be built and used.

#### Declaring the Function Prototype:

##### Format:

Function Data Type Function Name (Data Type List);

##### Example:

```
int area(int,int);
```

#### Function Definitions:

This refers to building a user-defined function.

##### Format:

```
Function Data Type Function Name (Parameter List)
{ statements }
```

##### Example:

```
int area (int length, int width)
{return length*width;}
```

#### Calling a Function

Use the function name and any arguments to call a function. Example area(1,w);