

Subprograms

A subprogram is a program unit/module that performs a particular task. These subprograms are combined to form larger programs.

The purpose of the use of subprograms

- o Improvement of code reusability
- o Easy to test
- o Readability
- o Maintainability

Pascal provides two kinds of subprograms –

- Functions
- Procedures

Functions

A **function** is a group of statements that together perform a task. These subprograms return a single value.

Ex:

```
program exFunction;
var  a, b, ret : integer;

function max(num1, num2: integer): integer;
var  result: integer;

begin
    if (num1 > num2) then
        result := num1

    else
        result := num2;
end;

begin
    a := 100;
    b := 200;
    ret := max(a, b);

    writeln( 'Max value is : ', ret );
end.
```

Procedures

A procedure in Pascal starts with a *begin* and ends with an *end* just like a program;. It can also have its own variables. – these subprograms do not return a value directly.

Eg:-

```
program myprocedure;  
var a,b :integer;  
Procedure DoSomething (x ,y: integer);  
  
begin  
  Writeln ('area is : ', x*y);  
end;  
  
begin  
  a:=10;  
  b:=20;  
  DoSomething (a,b);  
end.
```