PASCAL - BOOLEANS

Pascal provides data type Boolean that enables the programmers to define, store and manipulate logical entities, such as constants, variables, functions and expressions, etc.

Boolean values are basically integer type. Boolean type variables have two pre-defined possible values **True** and **False**. The expressions resolving to a Boolean value can also be assigned to a Boolean type.

Free Pascal also supports the **ByteBool**, **WordBool** and **LongBool** types. These are of type Byte, Word or Longint, respectively.

The value False is equivalent to 0 *zero* and any nonzero value is considered True when converting to a Boolean value. A Boolean value of True is converted to -1 in case it is assigned to a variable of type LongBool.

It should be noted that logical operators **and**, **or** and **not** are defined for Boolean data types.

Declaration of Boolean Data Types

A variable of Boolean type is declared using the var keyword.

```
var
boolean-identifier: boolean;
```

for example,

```
var
choice: boolean;
```

Example

```
program exBoolean;
var
exit: boolean;

choice: char;
   begin
   writeln('Do you want to continue? ');
   writeln('Enter Y/y for yes, and N/n for no');
   readln(choice);

if(choice = 'n') then
   exit := true
else
   exit := false;

if (exit) then
   writeln(' Good Bye!')
else
   writeln('Please Continue');

readln;
end.
```

When the above code is compiled and executed, it produces the following result –

```
Do you want to continue?
Enter Y/y for yes, and N/n for no
N
Good Bye!
Y
```

```
Please Continue
```