MATLAB - IF...ELSEIF...ELSEIF...ELSE...END STATEMENTS

An **if** statement can be followed by one *ormore* optional **elseif...** and an **else** statement, which is very useful to test various conditions.

When using if... elseif...else statements, there are few points to keep in mind:

- An if can have zero or one else's and it must come after any elseif's.
- An if can have zero to many elseif's and they must come before the else.
- Once an else if succeeds, none of the remaining elseif's or else's will be tested.

Syntax

```
if <expression 1>
% Executes when the expression 1 is true
<statement(s)>

elseif <expression 2>
% Executes when the boolean expression 2 is true
<statement(s)>

Elseif <expression 3>
% Executes when the boolean expression 3 is true
<statement(s)>

else
%  executes when the none of the above condition is true
<statement(s)>
end
```

Example

Create a script file and type the following code in it –

```
a = 100;
%check the boolean condition
   if a == 10
      % if condition is true then print the following
      fprintf('Value of a is 10\n' );
   elseif( a == 20 )
      % if else if condition is true
      fprintf('Value of a is 20\n' );
   elseif a == 30
      % if else if condition is true
      fprintf('Value of a is 30\n' );
   else
      % if none of the conditions is true '
      fprintf('None of the values are matching\n');
   fprintf('Exact value of a is: %d\n', a );
   end
```

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

```
None of the values are matching
Exact value of a is: 100
```