#### **Tutorial 4.3.1 if Statement**

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number less than or equal to 10: ');
y = 12; % hard entry to overide "No input" error
% If y is greater than 10, change its value to 10
if y > 10
     fprintf('The number you entered is greater than 10. It will be changed to 10. \n')
     y = 10;
end

Y
The number you entered is greater than 10. It will be changed to 10.
y =
     10
```

#### **Tutorial 4.3.1 if Statement.2**

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 0; % hard entry to overide "No input" error
% If y is greater than 10, change its value to 10
if y > 10 | y < 1
    fprintf('The number you entered is outside the range. It will be changed
 to 10. \n')
    if y > 10
        y = 10;
        fprintf('The number has been changed to 10.\n');
    if y < 1
       y = 1;
        fprintf('The number has been changed to 1.\n')
    end
end
У
The number you entered is outside the range. It will be changed to 10.
The number has been changed to 1.
y =
     1
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 4; % hard entry to overide "No input" error
% If y is greater than 10, change its value to 10
if y > 10 | y < 1</pre>
    fprintf('The number you entered is outside the range. It will be changed
 to 10. \n')
    if y > 10
        y = 10;
        fprintf('The number has been changed to 10.\n');
    if y < 1
       y = 1;
        fprintf('The number has been changed to 1.\n')
    end
end
У
y =
     4
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 11; % hard entry to overide "No input" error
% If y is greater than 10, change its value to 10
if y > 10 | y < 1
    fprintf('The number you entered is outside the range. It will be changed
 to 10. \n')
    if y > 10
        y = 10;
        fprintf('The number has been changed to 10.\n');
    if y < 1
       y = 1;
        fprintf('The number has been changed to 1.\n')
    end
end
У
The number you entered is outside the range. It will be changed to 10.
The number has been changed to 10.
y =
    10
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 0; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately
if y > 10 | y < 1
    fprintf('The number you entered is outside the range. It will be changed
 to 10. \n')
    if y > 10
        fprintf('The number has been changed to 10.\n');
    if y < 1
       y = 1;
        fprintf('The number has been changed to 1.\n')
    end
else
    fprintf('The number is within the range\n')
end
The number you entered is outside the range. It will be changed to 10.
The number has been changed to 1.
y =
     1
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 4; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately
if y > 10 | y < 1
    fprintf('The number you entered is outside the range. It will be changed
 to 10. \n')
    if y > 10
        fprintf('The number has been changed to 10.\n');
    if y < 1
       y = 1;
        fprintf('The number has been changed to 1.\n')
    end
else
    fprintf('The number is within the range\n')
end
The number is within the range
y =
     4
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 11; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately
if y > 10 | y < 1
    fprintf('The number you entered is outside the range. It will be changed
 to 10. \n')
    if y > 10
        fprintf('The number has been changed to 10.\n');
    if y < 1
       y = 1;
        fprintf('The number has been changed to 1.\n')
    end
else
    fprintf('The number is within the range\n')
end
The number you entered is outside the range. It will be changed to 10.
The number has been changed to 10.
y =
    10
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 0; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately
if y > 10
    fprintf('The number is too high. It will be changed to 10.\n');
   y = 10;
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
else
    fprintf('The number is within the range\n')
end
У
The number is too low. It will be changed to 1.
y =
     1
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 4; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately
if y > 10
    fprintf('The number is too high. It will be changed to 10.\n');
   y = 10;
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
else
    fprintf('The number is within the range\n')
end
У
The number is within the range
     4
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 11; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately
if y > 10
    fprintf('The number is too high. It will be changed to 10.\n');
    y = 10;
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
else
    fprintf('The number is within the range\n')
end
У
The number is too high. It will be changed to 10.
y =
    10
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 0; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately and output the
% new value.
if y > 15
    fprintf('The number is too high. The program is terminating.\n')
elseif y > 10
    fprintf('The number is slightly too high. It will be changed to 1.\n')
elseif y == 10
    fprintf('The number is at the upper limit.\n')
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
else
    fprintf('The number is within the range\n')
end
The number is too low. It will be changed to 1.
y =
     1
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 4; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately and output the
% new value.
if y > 15
    fprintf('The number is too high. The program is terminating.\n')
elseif y > 10
    fprintf('The number is slightly too high. It will be changed to 1.\n')
elseif y == 10
    fprintf('The number is at the upper limit.\n')
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
    y = 1
else
    fprintf('The number is within the range\n')
end
The number is within the range
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 11; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately and output the
% new value.
if y > 15
    fprintf('The number is too high. The program is terminating.\n')
elseif y > 10
    fprintf('The number is slightly too high. It will be changed to 1.\n')
elseif y == 10
    fprintf('The number is at the upper limit.\n')
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
    y = 1
else
    fprintf('The number is within the range\n')
end
The number is slightly too high. It will be changed to 1.
y =
    10
```

```
% Clear the Command Window
clc
% Get user input
%y = input('Enter a number between 1 and 10: ');
y = 16; % hard entry to overide "No input" error
% If y is outside the range, change its value appropriately and output the
% new value.
if y > 15
    fprintf('The number is too high. The program is terminating.\n')
elseif y > 10
    fprintf('The number is slightly too high. It will be changed to 1.\n')
elseif y == 10
    fprintf('The number is at the upper limit.\n')
elseif y < 1
    fprintf('The number is too low. It will be changed to 1.\n');
    y = 1
else
    fprintf('The number is within the range\n')
end
The number is too high. The program is terminating.
```