

Example: Create a script file to check the condition of X is less than 20, using if statement, input, fprintf to displays result.

Clear, clc

x= input ('x=');

if x < 20

fprintf('x is less than 20\n');

end

fprintf('value of x is : %d\n', x);

- the following result , When you run the file

>> x= 10

x is less than 20

value of x is : 10

EX: Create a script file to check condition of a.

Clear, clc

a = 100;

if a < 20

fprintf('a is less than 20\n');

else

fprintf('a is not less than 20\n');

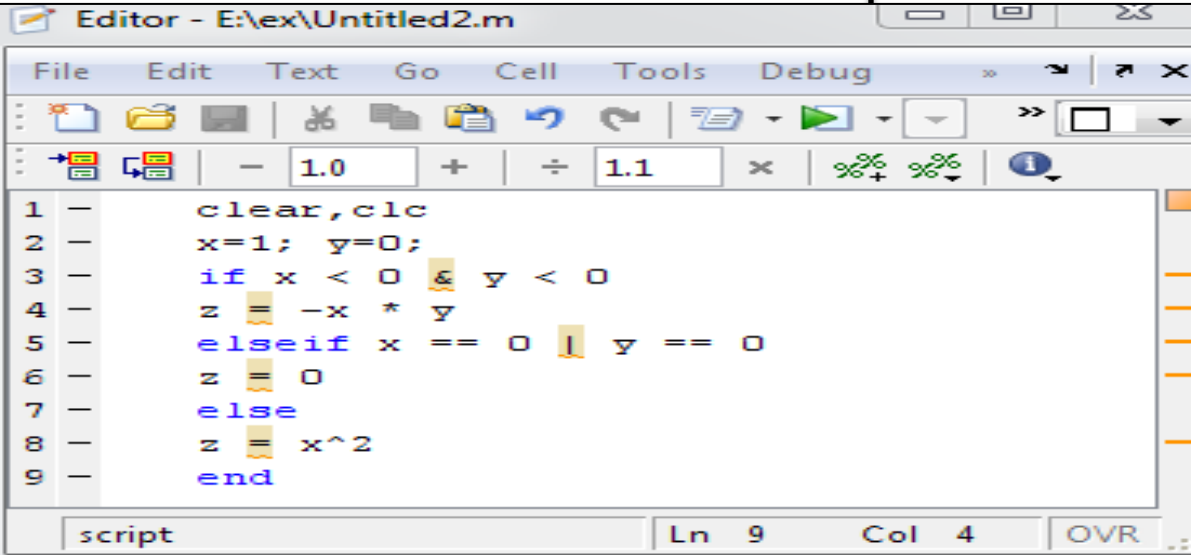
end

fprintf('value of a is : %d\n', a);

- the following result , When you run the file

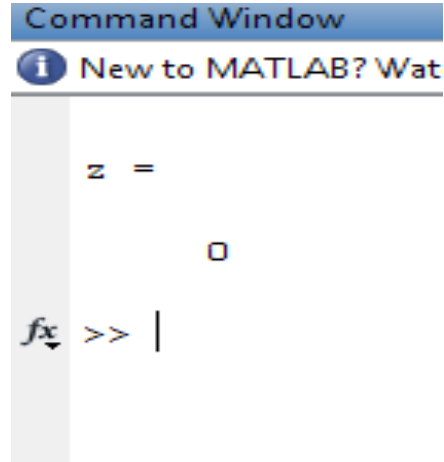
>> a is not less than 20

value of a is : 100

EX: 

```
1 clear, clc
2 x=1; y=0;
3 if x < 0 & y < 0
4     z = -x * y
5 elseif x == 0 | y == 0
6     z = 0
7 else
8     z = x^2
9 end
```

Command Window



z =

0

fx >> |

Matlab allows you to write together multiple condition expressions using the standard logic operators, "&" (*and*), "|" (*or*), and "~" (*not*).

For example to check if a is less than b and at the same time b is greater than or equal to c you would use the following commands:

if a < b & b >= c

Matlab commands

End

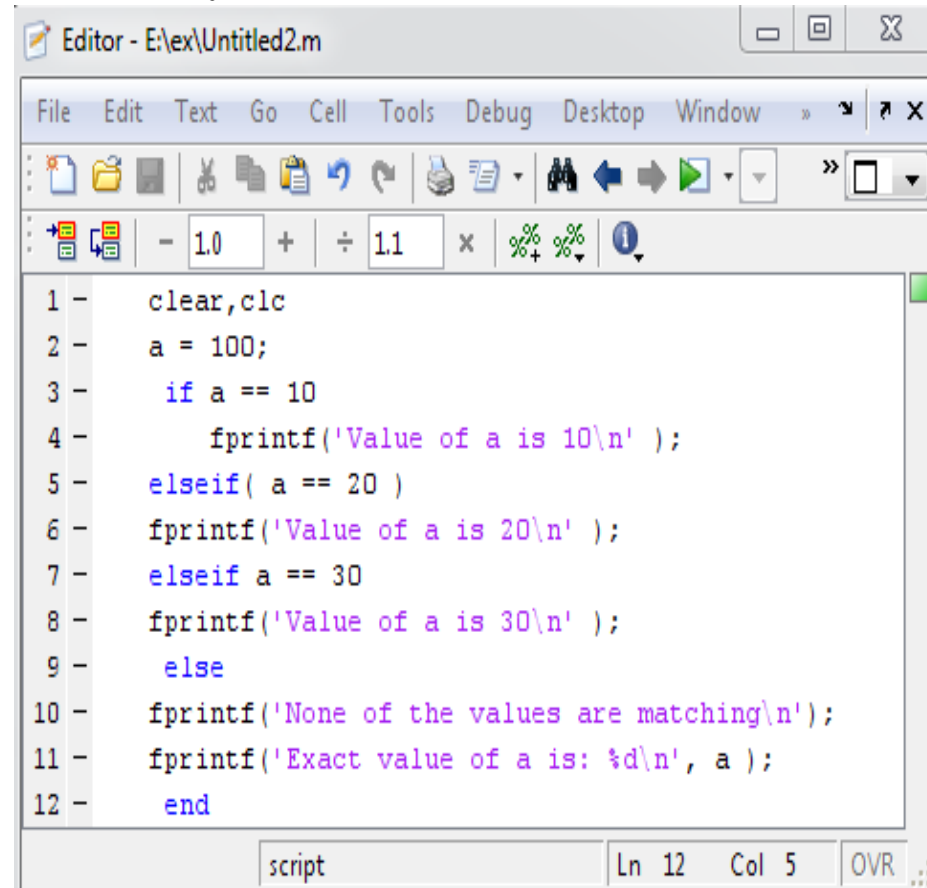
EX: Create a script file and type the following code in it:

```
a = 100;
b = 200;
if( a == 100 )
    if( b == 200 )
fprintf('Value of a is 100 and b is 200\n' );
    end
end
fprintf('Exact value of a is : %d\n', a );
fprintf('Exact value of b is : %d\n', b );
```

- When you run the file, it displays:

```
>>
Value of a is 100 and b is 200
Exact value of a is : 100
Exact value of b is : 200
```

EX:



```
Editor - E:\ex\Untitled2.m

File Edit Text Go Cell Tools Debug Desktop Window » 🔍 ✕

[Icons: New, Open, Save, Print, Copy, Paste, Undo, Redo, Find, Run, etc.]

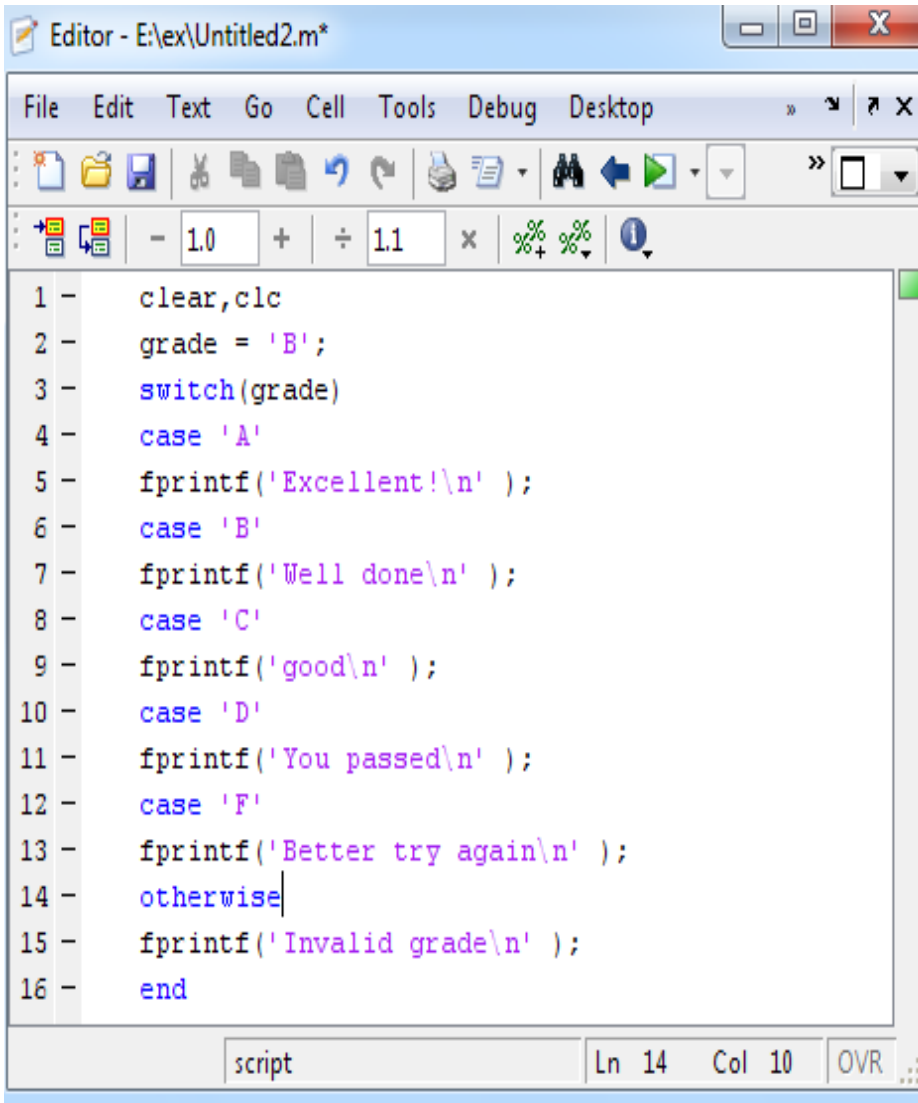
- 1.0 + ÷ 1.1 × % % % % ⓘ

1 - clear,clc
2 - a = 100;
3 - if a == 10
4 -     fprintf('Value of a is 10\n' );
5 - elseif( a == 20 )
6 -     fprintf('Value of a is 20\n' );
7 - elseif a == 30
8 -     fprintf('Value of a is 30\n' );
9 - else
10 -     fprintf('None of the values are matching\n');
11 -     fprintf('Exact value of a is: %d\n', a );
12 - end

script Ln 12 Col 5 OVR
```

Example:

Create a script file to find your case if you have B grade .



The image shows a MATLAB Editor window titled 'Editor - E:\ex\Untitled2.m*'. The window has a menu bar (File, Edit, Text, Go, Cell, Tools, Debug, Desktop) and a toolbar with various icons. Below the toolbar is a numeric keypad with buttons for '-', '1.0', '+', '÷', '1.1', 'x', '%%', and '%%'. The main text area contains the following MATLAB script:

```
1 - clear,clc
2 - grade = 'B';
3 - switch(grade)
4 - case 'A'
5 -     fprintf('Excellent!\n' );
6 - case 'B'
7 -     fprintf('Well done\n' );
8 - case 'C'
9 -     fprintf('good\n' );
10 - case 'D'
11 -     fprintf('You passed\n' );
12 - case 'F'
13 -     fprintf('Better try again\n' );
14 - otherwise
15 -     fprintf('Invalid grade\n' );
16 - end
```

The status bar at the bottom shows 'script', 'Ln 14', 'Col 10', and 'OVR ...'.

Nested switch statements

EX:

Clear, clc

a = 100;

b = 200;

switch(a)

case 100

fprintf('outer switch %d\n', a);

switch(b)

case 200

fprintf('inner switch %d\n', a);

end

end

fprintf('Exact value of a is : %d\n', a);

fprintf('Exact value of b is : %d\n', b);

- When you run the file, it displays:

>> outer switch 100

inner switch 100

Exact value of a is : 100

Exact value of b is : 200 C