

# Matlab commands III

## Relational operators

`A < B`

`A > B`

`A <= B`

`A >= B`

`A == B`

`A ~= B`: not equal to

## Logical operators

`&&`: Returns logical 1 (true) if both inputs evaluate to true, and logical 0 (false) if they do not.

`||`: Returns logical 1 (true) if either input, or both, evaluate to true, and logical 0 (false) if they do not.

## if/elseif/else

```
if expression
statements
elseif expression
statements
else
statements
end
```

Example:

```
A = rand(1,10);
```

```
limit = .75;
```

```
B = (A > limit); % B is a vector of logical values
```

```
if any(B)
```

```
% any: True if any element of a vector is a nonzero number or is logical 1 (TRUE).
```

```
fprintf('Indices of values > %4.2f: \n', limit);
```

```
disp(find(B)) % find: Find indices and values of nonzero elements
```

```
else
```

```
disp('All values are below the limit.')
```

```
end
```