

Other flow structure

Repeat Statements Until Expression Is False

Use a while loop to calculate factorial (10)

```
n = 10;
f = n;
while n > 1
    n = n-1;

    f = f*n;
end
disp(['n! = ' num2str(f) ])
```

```
n! = 3628800
```

% num2str - converts numeric array to character array

Switch,case, otherwise

Compare Single Values

Display different text conditionally, depending on a value entered at the command prompt

```
n = input( 'Enter a number: ' );

switch n

    case -1

        disp('negative one')
    case 0
        disp( 'zero')
    case 1
        disp('positive one')
    otherwise
        disp( 'other value' )
end
```

```
other value
```

```
Enter a number: 1
Enter a number: 3
```

Compare against multiple value

```
x = [12 64 24];
plottype = "bar";
switch plottype
    case "bar"
```

```
bar (x)
title("Bar Graph")
case {"pie", "pie3"}
pie3(x)
title('Pie Chart')
otherwise
warning( "Unexpected plot type. No plot created.")
end
```

