

## Read and write Text

```
fprintf(fid, 'Happy\n');
fprintf(fid, 'New\n');
fprintf(fid, 'Year\n');
fclose(fid);
op = fopen('weekdays.txt', 'wt');
fprintf(op, 'Sunday\nMonday\nTuesday\nWednesday\n');
fprintf(op, 'Thursday\nFriday\nSaturday\n');
fclose(op);
fileName = 'weekdays.txt';

FID = fopen(fileName);
data = textscan(FID, '%s');
fclose(FID);
stringData = string(data{:})
```

## Read and write numbers

```
clear all;

% create test file
data = [1 5 2 4 3 3 4 2 5 1];
filename = 'test_file.txt';
fid = fopen(filename, 'w');
fprintf(fid, '%d\n', data);
fclose(fid);

% (1) read file using fscanf
fid = fopen(filename, 'r');
y1 = fscanf(fid, '%d\n'); %interleaves columns
fclose(fid);
% (2) read file using textread (or textscan)
y2 = textread(filename, '%d');
% (3) read file using importdata
y3 = importdata(filename);
% (4) read file using load
y4 = load(filename);

disp('-----')
disp('    original vector data')
disp(data)
disp('    file content using fprintf')
disp(y2)
disp('    vector created by fscanf')
disp(y1)
disp('    matrix created by:')
disp('    textread    importdata    load')
disp([y1 y2 y3 y4])
```

### Write Array elements to the file

```
% A MATLAB program to write multiple numeric values to a text file.
% Create a sample array of integers.
x = [10 20 30 40 50; 100, 200, 300, 400, 500; 1000, 2000, 3000, 4000, 5000];
% Open the file for writing
file1 = fopen('TextFile1.txt', 'w');
% Check if the file was successfully opened
if file1 == -1
    error('Failed to open the file.');
```

end

```
% Write data to the text file;
fprintf(file1, '%d', x);
% Close the file to free up system resources
fclose(file1);
disp('Data has been written to the text file.')
```

fileID = fopen('TextFile1.txt', 'r');

```
%degrees = char(176);
[A,count] = fscanf(fileID, ['%d']);
fclose(fileID);
```

### Read & Write Table

```
Id = [101;201;303;209;134];
Shape = {'Pan';'Round';'Button';'Pan';'Round'};
Price = [10.0;13.59;10.50;12.00;16.69];
Stock = [376;502;465;1091;562];
T = table(Id,Shape,Price,Stock);
writetable(T,'tabledata.txt');
T = readtable("tabledata.txt")
```