Check Imaginary Numbers

back to Fan's Reusable Matlab Repository or Dynamic Asset Repository.

Basic Examples

```
rng(123);

% Imaginary array
ar_img = rand([1,7]) + 1i*rand([1,7]);

% Regular Array
ar_real = rand([1,10]);

% Combine arrays
ar_full = [ar_real ar_img];
ar_full = ar_full(randperm(length(ar_full)));
disp(ar_full);
```

```
  Columns 1 through 7

   0.6344 + 0.0000i   0.1755 + 0.0000i   0.5316 + 0.0000i   0.2861 + 0.4809i   0.7380 + 0.0000i   0.1825 + 0.0000i

  Columns 8 through 14

   0.2269 + 0.3921i   0.7245 + 0.0000i   0.8494 + 0.0000i   0.6110 + 0.0000i   0.4231 + 0.4386i   0.9808 + 0.0597i

  Columns 15 through 17

   0.3980 + 0.0000i   0.5513 + 0.3432i   0.7195 + 0.7290i
```

```
% real index
disp(~imag(ar_full));
```

```
   1   1   1   0   1   1   0   0   1   1   1   0   0   1   1   0   0
```

```
% Get Real and not real Components
disp(ar_full(imag(ar_full) == 0));
```

```
    0.6344    0.1755    0.5316    0.7380    0.1825    0.7245    0.8494    0.6110    0.5318    0.3980
```

```
disp(ar_full(imag(ar_full) ~= 0));
```

```
   0.2861 + 0.4809i   0.6965 + 0.6848i   0.2269 + 0.3921i   0.4231 + 0.4386i   0.9808 + 0.0597i   0.5513 + 0.3432i
```