Matlab Array Slicing and Subsetting

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

Given Array of size M, Select N somewhat equi-distance elements

```
% Subset count
it_n = 5;

% Example 1, long array
ar_fl_a = 1:1.1:100;
ar_it_subset_idx = unique(round(((0:1:(it_n-1))/(it_n-1))*(length(ar_fl_a)-1)+1));
ar_fl_a_subset = ar_fl_a(ar_it_subset_idx);
disp(ar_fl_a_subset);
```

```
    1.0000   26.3000   50.5000   75.8000  100.0000
```

```
% Example 2, Short Array
ar_fl_a = 1:1.1:3;
ar_it_subset_idx = unique(round(((0:1:(it_n-1))/(it_n-1))*(length(ar_fl_a)-1)+1));
ar_fl_a_subset = ar_fl_a(ar_it_subset_idx);
disp(ar_fl_a_subset);
```

```
    1.0000    2.1000
```

```
% Write As function
f_subset = @(it_subset_n, it_ar_n) unique(round(((0:1:(it_subset_n-1))/(it_subset_n-1))*(it_ar_

% Select 5 out of 10
disp(f_subset(5, 10));
```

```
     1     3     6     8    10
```

```
% Select 10 out of 5
disp(f_subset(10, 5));
```

```
     1     2     3     4     5
```

```
% Select 5 out of 5
disp(f_subset(5, 5));
```

```
     1     2     3     4     5
```