Module 11: Text Manipulation

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```
seq = 'Hello Chul Min!';

var = sum(seq ~= lower(seq));
```

```
words = ["egg", "mom", "dad", "car", "toy"];

vec = reverse(words);

var = sum(words == vec);
```

```
seq1 = "1234" + "5";

seq2 = '1234' + '5’;

seq3 = string(['1234' '5']);

seq4 = string(char('01234' + 1));
```

```
arr1 = randi(10, 3, 3)-5;
out1 = PosArrNew(arr1, "sum");
out2 = PosArrNew(arr1, "count");
out3 = PosArrNew(arr1, "loc");

function out = PosArrNew(in_arr, opt)

lg = in_arr >0;

if opt == "sum"
    out = sum(in_arr(lg));
elseif opt == "count"
    out = sum(lg, 'all');
elseif opt == "loc"
    out = find(lg);
end
end
```

```
seq1 = ["MATLAB", "is" , "fun."];
out1 = fliplr(seq1);

seq2 = ['MATLAB', 'is' , 'fun.'];
out2 = fliplr(seq2);
```

(A)["MATLAB", "is" , "fun."] and 'MATLABisfun.'

(B)["fun.", "is", "MATLAB"] and '.nufsiBALTAM'

(C)["fun.", "is", "MATLAB"] and 'fun.isMATLAB'

(D)["BALTAM", "si" , ".nuf"] and 'fun.isMATLAB'

```
cvec1 = 'CIVE';
cvec2 = 'ENVE';

str1 = "CIVE";
str2 = "ENVE";


val1 = numel(cvec1==cvec2);
val2 = numel(str1==str2);

val3 = sum(cvec1==cvec2);
val4 = sum(str1==str2);

val = val1 + val2 + val3 + val4;
```

```
mystrArry = ["ENVE121", "GEOE121", "AE121"];

val1 = numel(mystrArry);

val2 = numel(mystrArry(1));

val3 = numel(mystrArry{1});

val4 = numel(mystrArry{1}(1));

val = val1 + val2 + val3 + val4;
```

```
num1 = 12345;
num2 = 97;

char1 = '12345';
char2 = 'a';

val1 = numel(char1)
val2 = all(num2str(num1) == char1)
val3 = (string(num1) == string(char1))
val4 = (char(num2) == char2)

val = val1 + val2 + val3 + val4;
```

```
vec = [1 2 3 10 11 21 50 511];
digit = 1;

count = 0;
for ii=1:numel(vec)

    test_num = num2str(vec(ii));

    if any(test_num == num2str(digit))
       count = count + 1;
    end
end
```

M11008

```
vec = [1 2 3 10 11 21 50 511];
digit = 1;

count = 0;
for ii=1:numel(vec)

    test_num = num2str(vec(ii));
    lg = test_num == num2str(digit);

    count = count + sum(lg);
end
```

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```
strm = ["Chul Min", "Brad", "Jason", "Tom"];
n_name = numel(strm)

char_vec = zeros(1, n_name);
for ii=1:n_name
    char_vec(ii) = double(strm{ii}(1));
end

[~, I] = sort(char_vec, 'descend');

strm_out = strm(I);
```

★★★

(a) [“Chul Min”, “Brad”, “Jason”, “Tom”]
(b) [“Tom”, “Jason”, “Chul Min”, “Brad”]
(c) [“Chul Min”, “Jason”, “Brad”, “Tom”]
(d) [“Tom”, “Brad”, “Jason”, “Chul Min”]