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```
% Zachary Linkletter
% ECE 498 HW 05
% 3/5/18

clear all;
clc

ece271 = [ % ID, Score
900, 34;
801, 90;
700, 77;
400, 33]

ece473 = [ % ID, Score
900, 67;
802, 99;
700, 35;
500, 88]

% Combine ece271 and ece473 score report into a single one
ids = union(ece271(:,1), ece473(:,1));
scores = NaN*ones(length(ids),3);
scores(:,1) = ids;
[score271, ia, ib] = intersect(ids, ece271(:,1));
[score473, Ia, Ib] = intersect(ids, ece473(:,1));
scores(ia, 2) = ece271(ib, 2);
scores(Ia, 3) = ece473(Ib, 2);

scores

str = 'Welcome to ECE 498! My phone number is 207-581-2499. My email
      is hello@maine.edu. How to contact you?';

addr1 = '5713 Chadbourne Hall, Orono, ME 04469-5713';
addr2 = '73 Harlow St, Bangor, ME 04401';
addr3 = '141 Center St, Old Town, ME 04468';
addr{1} = addr1;
addr{2} = addr2;
addr{3} = addr3;

numwords = length(regexp(str, '\w*\s'))
numsentences = length(regexp(str, '(?<=[!?.])\s'))
email = regexp(str, '[a-z_]+@[a-z]+\.(com|net|edu)', 'match')
number = regexp(str, '\d{3}-\d{3}-\d{4}', 'match')
postalcode = regexp(addr, '\d{5}', 'match');
codes = [postalcode{1,:}]

filename = fullfile('myPatients.dat');

T = readtable(filename);
```

---

---

```
avgage = mean(T.Age)

T.BMI = (T.Weight*0.453592)./(T.Height*0.0254).^2

writetable(T, 'myPatients2.dat')
```

```
ece271 =
```

900	34
801	90
700	77
400	33

```
ece473 =
```

900	67
802	99
700	35
500	88

```
scores =
```

400	33	NaN
500	NaN	88
700	77	35
801	90	NaN
802	NaN	99
900	34	67

```
numwords =
```

```
16
```

```
numsentences =
```

```
3
```

```
email =
```

```
1×1 cell array
```

```
{'hello@maine.edu'}
```

```
number =
```

```
1×1 cell array
```

---

```
{ '207-581-2499' }
```

```
codes =
```

```
1×3 cell array
```

```
{ '04469' }    { '04401' }    { '04468' }
```

```
avgage =
```

```
41
```

```
T =
```

```
7×11 table
```

LastName	Gender	Age	Location	
Height	Weight	Smoker	Systolic	Diastolic
SelfAssessedHealthStatus		BMI		
'Smith'	'Male'	38	'County General Hospital'	71
176	1	124	93	'Excellent'
24.547				
'Johnson'	'Male'	43	'VA Hospital'	69
163	0	109	77	'Fair'
24.071				
'Williams'	'Female'	38	'St. Mary's Medical Center'	64
131	0	125	83	'Good'
22.486				
'Jones'	'Female'	40	'VA Hospital'	67
133	0	117	75	'Fair'
20.831				
'Brown'	'Female'	49	'County General Hospital'	64
119	0	122	80	'Good'
20.426				
'Davis'	'Female'	46	'St. Mary's Medical Center'	68
142	0	121	70	'Good'
21.591				
'Miller'	'Female'	33	'VA Hospital'	64
142	1	130	88	'Good'
24.374				

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