AERE 161 Lab 7

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Problem 7.4 Code

```
clear, clc;

%intialize names, verbs, and objects
names = {'Hammad ', 'Yugi ', 'Ryan '};
verbs = {'loves ', 'hates ', 'eats '};
objects = {'pizza.', 'chips.', 'Ryan.'};

%choose one of the terms at random
n = names(randi([1,3],1));
v = verbs(randi([1,3],1));
o = objects(randi([1,3],1));

%display results
disp(strcat(n,v,o));
```

Problem 7.4 Results
Trial 1
'Yugi hates Ryan.'

Trial 2
'Ryan loves chips.'

Trial 3
'Hammad eats pizza.'

Problem 8.13 Code

```
clear,clc;

%initialize ournames
ournames = struct('first', 'Hammad', 'second', 'Yugi', 'third',
'Ryan');

%output names
disp(ournames.first);
disp(ournames.second);
disp(ournames.third);
```

Problem 8.13 Results

```
Hammad
Yugi
Ryan
```

Problem 8.25

1. id: 33
   wt: 11.1100
   code: 'q'
2. 4
3. Invalid
4. 0
5. 2

Problem 9.11 Code
```
clear, clc;

%initialize variables
lines = 0;
x = 0;

while 1
    x = x+1; %iterate the loop
    %sequentially assign filenames
    name = strcat('exfile',num2str(x),'.dat');
    fid = fopen(name); %check if the file is valid
    if fid == -1 %if invalid filename (i.e. file isn't there)
        break %break the loop
    else %if valid
        s = load(name); %load the file as array s
        lines = lines + size(s,1); %add the height of the array
to lines
    end
end
%print results
fprintf('There are %d lines across the files. \n', lines);
```

Problem 9.1 Resources
exfile1.dat
```
1
2
3
```

exfile2.dat
```
1
2
3
4
5
```

Problem 9.11 Code
```
There are 8 lines across the files.
```