

Fill in the Blank 1:

```
x1 = ca{2}{1};  
x2 = ca{3}{2}{2:end};
```

Fill in the Blank 2:

```
Line 2: fieldnames(st)  
Line 5: fnames{i}  
Line 6: {st.(field)}  
Line 10: cell(1,len .* 2 - 1) OR zeros(1,len .* 2 - 1)
```

Fill in the Blank 3:

```
Line 5: {st.(banned)}  
Line 10: st = rmfield(st,banned);  
Line 14: isfield(st,'Talent')  
Line 25: st(inds)
```

Short Coding 1:

% ANSWER

```
header = petInfo(1,:);  
data = petInfo(2:end,:);  
mask = strcmp(header,'weight');  
col = cell2mat(data(:,mask));  
[~,inds] = sort(col);  
data = data(inds,:);  
updated = [header; data];
```

% ALTERNATIVE ANSWER

```
mask = strcmp(petInfo(1,:), 'weight');  
col = cell2mat(petInfo(2:end,mask));  
[~,inds] = sort(col);  
updated = petInfo([1 inds+1],:);
```

% There are other valid options! Ask on Piazza or run in MATLAB to verify.
% Remember that you must use strcmp to find the column associated with
% 'weight' -- assuming its the 3rd column is hard coding

Short Coding 2:

% ANSWER

```
header = petInfo(1,:);  
data = petInfo(2:end,:);  
col = data(:,2);  
mask = strcmpi(col,'dog') | strcmpi(col,'cat');  
data = data(mask,:);  
updated = [header; data];
```

% Alternate answer

```
col = petInfo(2:end,2);  
mask = strcmpi(col,'dog') | strcmpi(col,'cat');  
updated = petInfo([true mask],:);
```

Short Coding 3:

```
% solution  
freed = 0;  
st = box1;  
while ~isempty(st)  
    freed = freed + double(st.cat);  
    st = st.next;  
end
```

```
% alternate solution  
freed = 0;  
st = box1;  
while ~isempty(st)  
    if st.cat  
        freed = freed + 1;  
    end  
    st = st.next;  
end
```

Long Coding:

```
1  function wordComp(filename,word1,word2)
2  -   fh = fopen(filename);
3  -   newfilename = ['compare_' word1 '_' word2 '.txt'];
4  -   fhw = fopen(newfilename,'w');
5
6  -   line = fgetl(fh);
7  -   while ischar(line)
8  -       line = lower(line);
9  -       count1 = length(strfind(line, lower(word1)));
10 -      count2 = length(strfind(line, lower(word2)));
11 -      if count1 > count2
12 -          fprintf(fhw,'%s\n',word1);
13 -      elseif count1 < count2
14 -          fprintf(fhw,'%s\n',word2);
15 -      else
16 -          fprintf(fhw,'equal\n');
17 -      end
18 -      line = fgetl(fh);
19 -   end
20 -   fclose(fh);
21 -   fclose(fhw);
22 - end
```