```
1 function dish = yelp(filename, category, val)
2 [num, txt, raw] = xlsread(filename);
3 headers = raw(1,:);
4 % find the position of the column stored in the variable category
5 mask = strcmp(headers, category); (2 pts)
6 column = raw(:,mask);
  % sort the column of numbers extracted by the mask
8 [sorted, ind] = sort(cell2mat(column(2:end))); (3 pts)
9 raw = raw(ind,:);
10 mask2 = sorted < val;
11 % delete the rows that are less than val
12 raw([false mask2],:) = []; (3 pts)
13 % extract the columns that have prices
14 prices = cell2mat(raw(2:end, 4:6)); (2 pts)
15 avg = mean(prices, 2);
16 % make a new column where each row is the average of the prices with
17 % header 'Average Price'
18 newcol = ['Average Price'; num2cell(avg)]; (3 pts)
19 % Append your new column to the array
20 raw = [raw newcol]; (2 pts)
21 % extract the signature dish of the top restaurant ranked by
22 % category
23 dish = raw{2,3}; (2 pts)
24 % write to file ending with ' sorted.xlsx'
25 xlswrite([filename(1:end-5) 'sorted.xlsx'], raw); (3 pts)
26 end
Blank 1 (2):
strcmp(headers, category)
or find(strcmp(headers, category));
Give 1 point for strfind()
Blank 2 (3):
sort(cell2mat(column(2:end)))
Give 1 point for indexing
Give 1 point for cell2mat()
Give 1 point for sort()
Blank 3 (3):
raw([false mask2],:) = [];
Give 2 points if forget to account for header
Blank 4 (2):
raw(2:end,4:6)
Give 1 point if indexed entire column
Blank 5 (3):
['Average Price'; num2cell(avg)]
```

```
1 point for header
1 point for num2cell()
1 point for avg

Blank 6 (2):
[raw newcol]
No partial

Blank 7 (2):
raw{2,3};
Give 1 point if () instead of {}

Blank 8 (3):
xlswrite([filename(1:end-5) '_sorted.xlsx'], raw);
Give 2 points for error in file name
```