Problem 2. Answer the following question
The following function takes in any text file and makes a copy of the file omitting lines that are empty and lines that contain more than 10 words. The new file created has the same name as the input file with '2' appended to the end of the file name before the extension '.txt'. Fill in the blanks so the function works as intended.

NOTE: You do not need additional blanks or lines than are given, but you may add additional code if you choose and specify *exactly where* you are adding code.

```
1  function middleLengthLines(fileName)
2
3  fh = fopen(fileName);
4
5  fh2 = _____________________________ %Opens new file
6  line = fgetl(fh);
7
8  while _____________________________ %Condition to loop through file
9      if ~isempty(line)
10         count = 1;
11         [word, rest] = strtok(line);
12         while ~isempty(word)
13             _____________________________ %Adds to count
14             _____________________________ %Gets next word
15         end
16         if count <=10
17             _____________________________ %Adds line to new file
18                                           %with newline character
19         end
20     end
21 _____________________________ %Move towards terminating condition
22 end
23 fclose(fh);
24 fclose(fh2);
25 end
```

SOLUTION

```
1  function middleLengthLines(fileName)
2
3  fh = fopen(fileName);
4
5  fh2 = fopen([filename(1:end-4) '2.txt'], 'w') %Opens new file
6  line = fgetl(fh);
7
8  while ischar(line) %Condition to loop through file
9      if ~isempty(line)
10          count = 1;
11          [word, rest] = strtok(line);
12          while ~isempty(word)
13               count = count + 1 %Adds to count
14               [word, rest] = strtok(rest) %Gets next word
15          end
16          if count <=10
17                fprintf(fh2, [line '\n']) %Adds line to new
          %file 18 with newline character
19          end
20     end
21 line = fgetl(fh) %Move towards terminating condition
22 end
23 fclose(fh);
24 fclose(fh2);
25 end
```