

Homework 5.1

Part 1

For each of the following fragments of code in this section, select the block/line of code that the selected statement is a part of.

1) What block of code does the statement on line 2 belong to?

```
1 if age > 21:  
2     print("You are old enough")
```

- a) The top / global scope.
- b) The `if` statement on line 1.
- c) None of the above.

2) What block of code does the statement on line 2 belong to?

```
1 while counter < 21:  
2     if age > 21:  
3         print("You are old enough")
```

- a) The top / global scope.
- b) The `while` statement on line 1.
- c) None of the above.

3) What block of code does the statement on line 3 belong to?

```
1 while counter < 21:  
2     if age > 21:  
3         print("You are old enough")
```

- a) The top / global scope.
- b) The `while` statement on line 1.
- c) The `if` statement on line 2.
- d) None of the above.

4) What block of code does the statement on line 2 belong to?

```
1 def show_message(age):  
2     if age > 21:  
3         print("You are old enough")
```

- a) The top / global scope.
- b) The `show_message` function on line 1.
- c) None of the above.

5) What block of code does the statement on line 5 belong to?

```
1 def show_message(age):  
2     if age > 21:  
3         print("You are old enough")  
4  
5 if age > 21:  
6     print("You are old enough")
```

- a) The top / global scope.
- b) The `show_message` function on line 1.
- c) None of the above.

Part 2

The following questions all relate to the snippet of code below.

```
1 def search_files(search_text, files):  
2     found_files = []  
3     for file in files:  
4         if search_text in file:  
5             found_files.append(file)  
6     return found_files
```

6) What block of code does the `return` statement belong to?

- a) The top / global scope.
- b) The `search_files` function on line 1.
- c) The `for` loop on line 3.
- d) The `if` statement on line 4.
- e) None of the above.

- 7) What block of code would the `return` statement belong to if it was indented to the right by one level?
- a) The top / global scope.
 - b) The `search_files` function on line 1.
 - c) The `for` loop on line 3.
 - d) The `if` statement on line 4.
 - e) None of the above.
- 8) What block of code would the `return` statement belong to if it was indented to the right by two levels?
- a) The top / global scope.
 - b) The `search_files` function on line 1.
 - c) The `for` loop on line 3.
 - d) The `if` statement on line 4.
 - e) None of the above.
- 9) What block of code does the `found_files` declaration on line 2 belong to?
- a) The top / global scope.
 - b) The `search_files` function on line 1.
 - c) The `for` loop on line 3.
 - d) The `if` statement on line 4.
 - e) None of the above.
- 10) Using your own words, explain when the `found_files` variable is declared (created).