

## Homework 4.1

For each of the following fragments of code, write what the output would be. Do this in your head without running the code (although feel free to check yourself when you're done).

```
1) age = 42
   if age > 10:
       print("You may enter")
```

```
2) age = 42
   if age > 10:
       print("You may enter")
   elif age > 20:
       print("Please try again next year")
```

```
3) age = 42
   if age > 20:
       print("Please try again next year")
   elif age > 10:
       print("You may enter")
```

```
4) age = 42
   if age > 10:
       print("You may enter")
   if age > 20:
       print("Please try again next year")
```

```
5) counter = 0
   while counter < 3:
       print(counter)
       counter = counter + 1
```

```

6) counter = 0
   while counter < 3:
       counter = counter + 1
       print(counter)

7) counter = 0
   while True:
       if counter > 3:
           break
       counter = counter + 1
       print(counter)

8) counter = 0
   while True:
       counter = counter + 1
       if counter > 3:
           break
       print(counter)

9) counter = 0
   while True:
       counter = counter + 1
       print(counter)
       if counter > 3:
           break

10) friends = ["Alec", "Ryan", "Sean"]
    counter = 0
    for friend in friends:
        counter = counter + 1
        print(str(counter) + " - " + friend)

```

## Examples

The questions below are not part of the assignment, they are examples included in this document to illustrate how the questions in this assignment should be answered.

1) `print(1 + 3)`

**Question 1 answer:**

4

2) `logged_in = True`  
`if logged_in:`  
    `print("You may proceed")`  
`else:`  
    `print("Please log in")`

**Question 2 answer:**

You may proceed

3) `counter = 0`  
`while counter < 3:`  
    `print("counter = " + str(counter))`  
    `counter = counter + 1`

**Question 3 answer:**

`counter = 0`  
`counter = 1`  
`counter = 2`