

Chapter 5

Question 1

What is wrong with this Python loop:

```
n = 5
while n > 0 :
    print(n)
print('All done')
```

- ☒ This loop will run forever
 - ☐ The **print('All done')** statement should be indented four spaces
 - ☐ There should be no colon on the **while** statement
 - ☐ **while** is not a Python reserved word
-

Question 2

What does the **break** statement do?

- ☐ Resets the iteration variable to its initial value
 - ☐ Exits the program
 - ☐ Jumps to the "top" of the loop and starts the next iteration
 - ☒ Exits the currently executing loop
-

Question 3

What does the **continue** statement do?

- ☐ Resets the iteration variable to its initial value
 - ☐ Exits the program
 - ☒ Jumps to the "top" of the loop and starts the next iteration
 - ☐ Exits the currently executing loop
-

Question 4

What does the following Python program print out?

```
tot = 0
for i in [5, 4, 3, 2, 1] :
    tot = tot + 1
print(tot)
```

- ☒ 5
 - ☐ 10
 - ☐ 0
 - ☐ 15
-

Question 5

What is the *iteration* variable in the following Python code:

```
friends = ['Joseph', 'Glenn', 'Sally']
for friend in friends :
    print('Happy New Year:', friend)
print('Done!')
```

- ☒ friend
 - ☐ Glenn
 - ☐ Sally
 - ☐ friends
-

Question 6

What is a good description of the following bit of Python code?

```
zork = 0
for thing in [9, 41, 12, 3, 74, 15] :
    zork = zork + thing
print('After', zork)
```

- ☒ Sum all the elements of a list
 - ☐ Find the smallest item in a list
 - ☐ Count all of the elements in a list
 - ☐ Find the largest item in a list
-

Question 7

What will the following code print out?

```
smallest_so_far = -1
for the_num in [9, 41, 12, 3, 74, 15] :
    if the_num < smallest_so_far :
        smallest_so_far = the_num
print(smallest_so_far)
```

Hint: This is a trick question and most would say this code has a bug - so read carefully

- ☒ -1
- ☐ 74

- ☐ 42
 - ☐ 3
-

Question 8

What is a good statement to describe the **is** operator as used in the following if statement:

```
if smallest is None :  
    smallest = value
```

- ☐ The if statement is a syntax error
 - ☐ Is true if the **smallest** variable has a value of -1
 - ☒ matches both type and value
 - ☐ Looks up 'None' in the **smallest** variable if it is a string
-

Question 9

Which reserved word indicates the start of an "indefinite" loop in Python?

- ☐ def
 - ☐ break
 - ☒ while
 - ☐ indef
 - ☐ for
-

Question 10

How many times will the body of the following loop be executed?

```
n = 0  
while n > 0 :  
    print('Lather')  
    print('Rinse')  
print('Dry off!')
```

- ☐ 5
 - ☒ 0
 - ☐ This is an infinite loop
 - ☐ 1
-