

CPSC 110 RAT Chapter 6

Name: _____

1. What does a loop mean in an algorithm?
 - a. That sometimes one step should be done, and sometimes another
 - b. That some steps do not need to be done
 - c. That the algorithm is broken into multiple parts
 - d. That some of the steps should be repeated over again

2. What is **not** true of a while loop in Python?
 - a. It always does the loop body at least one time
 - b. It keeps going as long as the condition is true
 - c. It checks the condition each time through the loop
 - d. They can continue forever

3. What happens if you accidentally create an infinite loop in a program?
 - a. The program will stop automatically after 5 minutes
 - b. You can stop it in Thonny with the stop button
 - c. You will have to restart your computer
 - d. It's not possible for a loop to be infinite

4. What is the purpose of a for loop in Python?
 - a. To loop until a condition is **not** true
 - b. To loop until the user decides to stop
 - c. To loop over a sequence of items, and do something with each
 - d. To loop exactly four times

5. What is the purpose of the Python range command?
 - a. It allows you to input a true or false value
 - b. It performs a loop all by itself
 - c. It gives you a sequence of numbers from a starting point to an ending point
 - d. It allows you to check when a loop is done

6. Which call to range will give us the odd numbers starting from 1 up to 9?

- a. range(1, 10, 2)
- b. range(9, 1, -2)
- c. range(1, 9, "odd")
- d. range("odd", 9, 1)

7. Which of the following is an example of a sequence that we can loop over with a for loop?

- a. An integer
- b. A boolean
- c. A string
- d. An input statement

8. What does the following program output?

```
x = 3
while x > 0:
    print(x)
    x = x - 1
```

a.

x
x
x

b.

3
2
1

c.

3
2
1
0

d.

1
2
3

9. What does the following program print?

```
for char in "Hi!":  
    print("Next:", char)
```

- a.
Next: Hi!
- b.
(it prints no output at all)
- c.
Next: Hi!
Next: Hi!
Next: Hi!
- d.
Next: H
Next: i
Next: !

10. What does the following program print?

```
for i in range(3, 6):  
    print(i)
```

- a.
i
i
i
- b.
3
4
5
- c.
6
5
4
3
- d.
3
5