5. How many asterisks does the following code fragment print?

a = 0

while a < 100:

print('\*', end='')

print()

6. How many asterisks does the following code fragment print?

a = 0

while a > 100:

print('\*', end='')

a += 1

print()

7. How many asterisks does the following code fragment print?

a = 0

while a < 100:

b = 0

while b < 55:

print('\*', end='')

b += 1

print()

a += 1

8. How many asterisks does the following code fragment print?

a = 0

while a < 100:

if a % 5 == 0:

print('\*', end='')

a += 1

print()

9. How many asterisks does the following code fragment print?

a = 0

while a < 100:

b = 0

while b < 40:

if (a + b) % 2 == 0:

print('\*', end='')

b += 1

print()

a += 1

10. How many asterisks does the following code fragment print?

a = 0

while a < 100:

b = 0

while b < 100:

c = 0

while c < 100:

print('\*', end='')

c += 1

b += 1

a += 1

print()

11. What is minimum number of arguments acceptable to the range expression?

12. What is maximum number of arguments acceptable to the range expression?

13. Provide the exact sequence of integers specified by each of the following range expressions.

(a) range(5)

(b) range(5, 10)

(c) range(5, 20, 3)

(d) range(20, 5, -1)

(e) range(20, 5, -3)

(f) range(10, 5)

(g) range(0)

(h) range(10, 101, 10)

(i) range(10, -1, -1)

(j) range(-3, 4)

(k) range(0, 10, 1)

14. What is a shorter way to express range(0, 5, 1)?

15. Provide an equivalent Python range expression for each of the following integer sequences.

(a) 1,2,3,4,5

(b) 5,4,3,2,1

(c) 5,10,15,20,25,30

(d) 30,25,20,15,10,5

(e) −3,−2,−1,0,1,2,3

(f) 3,2,1,0,−1,−2,−3

(g) −50,−40,−30,−20,−10

(h) Empty sequence

16. If x is bound to the integer value 2, what integer sequence does range(x, 10\*x, x) represent?

17. If x is bound to the integer value 2 and y is bound to the integer 5, what integer sequence does

range(x, x + y) represent?’

18. Is it possible to represent the following sequence with a Python range expression: 1,−1,2,−2,3,−3,4,−4?

19. How many asterisks does the following code fragment print?

for a in range(100):

print('\*', end='')

print()

20. How many asterisks does the following code fragment print?

for a in range(20, 100, 5):

print('\*', end='')

print()

21. How many asterisks does the following code fragment print?

for a in range(100, 0, -2):

print('\*', end='')

print()

22. How many asterisks does the following code fragment print?

for a in range(1, 1):

print('\*', end='')

print()

23. How many asterisks does the following code fragment print?

for a in range(-100, 100):

print('\*', end='')

print()

24. How many asterisks does the following code fragment print?

for a in range(-100, 100, 10):

print('\*', end='')

print()

25. Rewrite the code in the previous question so it uses a while instead of a for. Your code should

behave identically.

26. What does the following code fragment print?

a = 0

while a < 100:

print(a)

a += 1

print()

27. Rewrite the code in the previous question so it uses a for instead of a while. Your code should

behave identically.

28. What is printed by the following code fragment?

a = 0

while a > 100:

print(a)

a += 1

print()