Review Questions

1. The following code is executed

**def f(x):**

**return x + 2, x \* 2**

**x, y = f(5)**

**print(x + y)**

What is the output produced by the print() statement?

(a) 7 10

(b) 17

(c) x + y

(d) This produces an error.

(e) None of the above.

2. True or False: Names that are valid for variables are also valid for functions.

3. What output is produced by the print() statement when the following code is executed?

**def calc\_q1(x):**

**q = 4 \* x + 1**

**return q**

**calc\_q1(5)**

**print(q)**

(a) 24

(b) 21

(c) q

(d) This produces an error.

(e) None of the above.

4. What is the value of q after the following code has been executed?

**def calc\_q2(x):**

**q = 4 \* x + 1**

**print(q)**

**q = calc\_q2(5)**

(a) 24

(b) 21

(c) This produces an error.

(d) None of the above.

5. What is the value of q after the following code has been executed?

**q = 20**

**def calc\_q3(x):**

**q = 4 \* x + 1**

**return q**

**q = calc\_q3(5)**

(a) 24

(b) 21

(c) This produces an error.

(d) None of the above.

6. What is the output produced by the print() statement in the following code?

**def calc\_q4(x):**

**q = 4 \* x + 1**

**print(calc\_q4(5))**

(a) 24

(b) 21

(c) q

(d) This produces an error.

(e) None of the above.

7. What is the output of the print() statement in the following code?

**abc = 5 + 6 // 12**

**print(abc)**

(a) This produces an error.

(b) 5 + 6 // 12

(c) 5

(d) 5.5

(e) 6

8. What is the output of the print() statement in the following code?

**def = 5 + 6 % 7**

**print(def)**

(a) This produces an error.

(b) 5 + 6 % 7

(c) 11

(d) 4

9. The following code is executed:

**def get\_input():**

**x = float(input("Enter a number: "))**

**return x**

**def main():**

**get\_input()**

**print(x \*\* 2)**

**main()**

At the prompt the user enters 2. What is the output of this program?

(a) x \*\* 2

(b) 4

(c) 4.0

(d) This produces an error.

(e) None of the above.

10. The following code is executed:

**def get\_input():**

**x = float(input("Enter a number: "))**

**return x**

**def main():**

**print(get\_input() \*\* 2)**

**main()**

At the prompt the user enters 2. What is the output of this program?

(a) get\_input() \*\* 2

(b) 4

(c) 4.0

(d) This produces an error.

(e) None of the above.

11. What is the value of z after the following code is executed?

**def f1(x, y):**

**print((x + 1) / (y - 1))**

**z = f1(3, 3) + 1**

(a) 3

(b) 3.0

(c) 2

(d) This produces an error.

12. What is the value of z after the following code is executed?

**def f2(x, y):**

**return (x + 1) / (y - 1)**

**z = f2(3, 3) + 1**

(a) 3

(b) 3.0

(c) 2

(d) This produces an error.

(e) None of the above.

13. What is the value of z after the following code is executed?

**def f3(x, y = 2):**

**return (x + 1) / (y - 1)**

**z = f3(3, 3) + 1**

(a) 3

(b) 3.0

(c) 2

(d) This produces an error.

(e) None of the above.

14. What is the value of z after the following code is executed?

**def f3(x, y = 2):**

**return (x + 1) / (y - 1)**

**z = f3(3) + 1**

(a) 3

(b) 3.0

(c) 2

(d) This produces an error.

(e) None of the above.

15. The following code is executed.

**def inc\_by\_two(x):**

**x = x + 2**

**return x**

**x = 10**

**inc\_by\_two(x)**

**print("x = ", x)**

What is the output produced by the print() statement?

X = 10