

CSC 361E: GENERIC PROGRAMMING WITH PYTHON.

SET B TIME: 40 MINUTES

1. When will the following loop terminate?

```
while keep_on_going != 999:
```

- a. when ~~keep_on_going~~ refers to a value less than 999
- b. when ~~keep_on_going~~ refers to a value greater than 999
- c. when ~~keep_on_going~~ refers to a value equal to 999
- d. when ~~keep_on_going~~ refers to a value not equal to 999

2. In Python, a comma-separated sequence of data items that are enclosed in a set of brackets is called

- a. sequence
- b. variable
- c. value
- d. list

3. In Python, the variable in the ~~for~~ clause is referred to as the _____ because it is the target of an assignment at the beginning of each loop iteration.

- a. target variable
- b. loop variable
- c. for variable
- d. count variable

4. Which of the following represents an example to calculate the sum of numbers (that is, an accumulator), given that the number is stored in the variable ~~number~~ and the total is stored in the variable ~~total~~?

- a. total + number = total
- b. number += number
- c. total += number
- d. total = number

5. What will be displayed after the following code is executed?

```
total = 0
for count in range(1, 4):
    total += count
print(total)
```

1, 2, 3

- ~~a. 1~~
- ~~b. 5~~
- ~~c. 1, 4~~
- ~~d. 6~~

$$1+2=3+3=6$$

6

0, 5, 10, 15, 20

6. What will be displayed after the following code is executed?

```
for num in range(0, 20, 5):
    num += num
    print(num)
```

- ~~a. 30~~
- ~~b. 25~~
- ~~c. 0 5 10 15 20~~
- ~~d. 5 10 15~~

0, 5, 10, 15

7. What does the following program do?

```
student = 1
while student <= 3:
    total = 0
    for score in range(1, 4):
        score = int(input("Enter test score: "))
        total += score
    average = total/3
    print("Student ", student, "average: ", average)
    student += 1
```

REG:

COM10014120

KIBABII UNIVERSITY

S

CSC 361E: GENERIC PROGRAMMING WITH PYTHON.

SET B TIME: 40 MINUTES

1. When will the following loop terminate?

~~while keep_on_going != 999:~~

- a. when ~~keep_on_going~~ refers to a value less than 999
- b. when ~~keep_on_going~~ refers to a value greater than 999
- c. when ~~keep_on_going~~ refers to a value equal to 999
- d. when ~~keep_on_going~~ refers to a value not equal to 999

2. In Python, a comma-separated sequence of data items that are enclosed in a set of brackets is called

- a. sequence
- b. variable
- c. value
- d. list

3. In Python, the variable in the `for` clause is referred to as the _____ because it is the target of an assignment at the beginning of each loop iteration.

- a. target variable
- b. loop variable
- c. for variable
- d. count variable

4. Which of the following represents an example to calculate the sum of numbers (that is, an accumulator) given that the number is stored in the variable `number` and the total is stored in the variable `total`?

- a. total + number = total
- b. number += number
- c. total += number
- d. total = number

5. What will be displayed after the following code is executed?

```
total = 0
for count in range(1, 4):
    total += count
print(total)
```

1, 2, 3

- ~~a. 1~~
- b. 5
- c. 1, 4
- ~~d. 6~~

$$1+2=3+3=6$$

3

6

0, 5, 10, 15 20

6. What will be displayed after the following code is executed?

```
for num in range(0, 20, 5):
    num += num
print(num)
```

a. 30

b. 25

- ~~a. 0 5 10 15 20~~

~~d. 5 10 15~~

7. What does the following program do?

```
student = 1
while student <= 3:
    total = 0
    for score in range(1, 4):
        score = int(input("Enter test score: "))
        total += score
    average = total/3
    print("Student ", student, "average: ", average)
    student += 1
```

B

Martin Kinoti MUTUGI

KIBABII UNIVERSITY

- a. It accepts 4 test scores for 3 students and outputs the average of the 12 scores.
- b. It accepts 3 test scores for each of 3 students and outputs the average for each student.
- c. It accepts 4 test scores for 2 students, then averages and outputs all the scores.
- d. It accepts one test score for each of 3 students and outputs the average of the 3 scores.

8. What does the following statement mean?

```
num1, num2 = get_num()
```

- a. The function `get_num()` is expected to return a value for `num1` and for `num2`.
- b. The function `get_num()` is expected to return one value and assign it to `num1` and `num2`.
- c. This statement will cause a syntax error.
- d. The function `get_num()` will receive the values stored in `num1` and `num2`.

9. What will display after the following code is executed?

```
def main():
    print("The answer is", magic(5))
def magic(num):
    answer = num + 2 * 10
    return answer
main()
```

- a. 70
- b. 25
- c. 100
- d. The statement will cause a syntax error.

10. In a value-returning function, the value of the expression that follows the keyword _____ will be sent back to the part of the program that called the function.

- a. def
- b. result
- c. sent
- d. return

11. Which mode specifier will erase the contents of a file if it already exists and create the file if it does not already exist?

- a. 'w'
- b. 'r'
- c. 'a'
- d. 'e'

12. Which method could be used to strip specific characters from the end of a string?

- a. `strip`
- b. `rstrip`
- c. `strip`
- d. `remove`

13. Which method could be used to convert a numeric value to a string?

- a. `str`
- b. `value`
- c. `num`
- d. `chr`

14. Which of the following is the correct way to open a file named `users.txt` in 'r' mode?

- a. `infile = open('r', users.txt)`
- b. `infile = read('users.txt', 'r')`
- c. `infile = open('users.txt', 'r')`
- d. `infile = readlines('users.txt', r)`

15. Which of the following is the correct way to open a file named `users.txt` to write to it?

- a. `outfile = open('w', users.txt)`
- b. `outfile = write('users.txt', 'w')`
- c. `outfile = open('users.txt', 'w')`
- d. `outfile = open('users.txt')`

16. Which list will be referenced by the variable `number` after the following code is executed?

```
number = range(0, 9, 2)
```

- a. [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
- b. [1, 3, 5, 7, 9]

25/
37

c. [2, 4, 6, 8]

d. [0, 2, 4, 6, 8]

17. Which of the following would you use if an element is to be removed from a specific index?

- a. a del statement b. a remove method c. an index method d. a slice method

18. What is the first negative index in a list?

- a. 0 b. -1 c. -0 d. the size of the list minus 1

19. Which method can be used to place an item at a specific index in a list?

- a. append b. index c. insert d. add

20. Which method or operator can be used to concatenate lists?

- a. * b. + c. % d. concat

21. Which method can be used to convert a list to a tuple?

- a. append b. tuple c. insert d. list

22. Which method can be used to convert a tuple to a list?

- a. Append b. tuple c. insert d. list

23. A(n) _____ structure is a logical design that controls the order in which a set of statements execute.

- a. function
b. control
c. sequence
d. iteration

24. The decision structure that has two possible paths of execution is known as

- a. single alternative
b. double alternative
c. dual alternative
d. two alternative

25. Multiple Boolean expressions can be combined by using a logical operator to create _____ expressions.

- a. sequential
b. logical
c. compound
d. mathematical

26. When using the _____ logical operator, one or both of the subexpressions must be true for the compound expression to be true.

- a. or
b. and
c. not
d. maybe

27. Which of the following is the correct if clause to determine whether y is in the range 10 through 50, inclusive?

- a. if $10 < y$ or $y > 50$: b. if $10 > y$ and $y < 50$: c. if $y \geq 10$ and $y \leq 50$: d. if $y \geq 10$ or $y \leq 50$

28. What is the result of the following Boolean expression, given that $x = 5$, $y = 3$, and $z = 8$?

$$x < y \text{ or } z > x$$

- a. True b. False c. 8 d. 5

29. What is the result of the following Boolean expression, given that $x = 5$, $y = 3$, and $z = 8$?

$$x < y \text{ and } z > x$$

- a. True b. False c. 8 d. 5

30. What is the result of the following Boolean expression, given that $x = 5$, $y = 3$, and $z = 8$?

$$\text{not } (x < y \text{ or } z > x) \text{ and } y < z$$

- a. True b. False c. 8 d. 5

31. Which of the following is the correct `if` clause to determine whether `choice` is anything other than 10?

- a. if choice != 10: b. if choice != 10 c. if choice <> 10: d. if not(choice < 10 and choice > 10):

32. When using the _____ logical operator, both subexpressions must be true for the compound expression to be true.

- a. or b. and c. not d. either or or and

33. What type of loop structure repeats the code a specific number of times?

- a. condition-controlled loop b. number-controlled loop c. count-controlled loop d. Boolean-controlled loop

34. What type of loop structure repeats the code based on the value of Boolean expression?

- a. condition-controlled loop b. number-controlled loop c. count-controlled loop
d. Boolean-controlled loop

35. What are the values that the variable `num` contains through the iterations of the following `for` loop?

`for num in range(2, 9, 2):`

- a. 2, 3, 4, 5, 6, 7, 8, 9 b. 2, 5, 8 c. 2, 4, 6, 8 d. 1, 3, 5, 7, 9

36. What are the values that the variable `num` contains through the iterations of the following `for` loop?

`for num in range(4):`

- a. 1, 2, 3, 4 b. 0, 1, 2, 3, 4 c. 1, 2, 3 d. 0, 1, 2, 3

37. Which of the following is not an augmented assignment operator?

- a. *= b. /= c. += d. <=