Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Minutes studied\_\_\_\_\_\_\_\_\_\_\_\_\_

Programming in Python – MPA2

\_\_\_\_\_\_\_ 1. What method or operator can be used to concatenate lists?

a. \*

b. +

c. %

d. &

\_\_\_\_\_\_\_ 2. What is a group of statements that exists within a program for the purpose of performing a specific task?

a. function

b. subtask

c. procedure

d. subprogram

\_\_\_\_\_\_\_ 3. What is the advantage of using tuples over lists?

a. Tuples are not limited in size.

b. Tuples can include any data type as an element.

c. Processing a tuple is faster than processing a list.

d. There is no advantage.

\_\_\_\_\_\_\_ 4. If a box is drawn starting at (x,y) coordinate (0,0), where will it be on the screen?

 a. center

 b. upper right

 c. upper left

 d. lower right

\_\_\_\_\_\_\_ 5. Tuples are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sequences, which means that once a tuple is created, it cannot be changed.

a. immutable

b. mutable

c. enumerated

d. recursive

\_\_\_\_\_\_\_ 6. Lists are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which means their elements can be changed.

a. immutable

b. mutable

c. enumerated

d. recursive

\_\_\_\_\_\_\_ 7. When something is triggered in a pygame code, it is called this?

 a. occurrence

 b. event

 c. import

 d. module

\_\_\_\_\_\_\_ 8. What will be the output?

t=(1,2,4,3)

t[1:-1]

a. (1, 2)

b. (1, 2, 4)

c. (2, 4)

d. (2, 3, 4)

\_\_\_\_\_\_\_ 9. If the screen width = 400 pixels and height = 200 pixels, which set of coordinates will not show the picture on the screen?

 a. 0,0

 b. 200,100

 c. 0, 100

 d. 100, 200

\_\_\_\_\_\_\_ 10. Each element in a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has two parts: a key and a value.

 a. tuple

 b. dictionary

 c. list

 d. string

\_\_\_\_\_\_\_ 11. In computer graphics, as x and y coordinates decreases in value, a point will move:

 a. up and to the left

 b. down and to the right

 c. up and to the right

 d. down and to the left

\_\_\_\_\_\_\_ 12. What will be the output?

t=(1,2,4,3)

t[1:3]

a. (1, 2)

b. (1, 2, 4)

c. (2, 4)

d. (2, 3, 4)

\_\_\_\_\_\_\_ 13. What color would be defined by (255, 255, 255)?

 a. black

 b. white

 c. grey

 d. red

\_\_\_\_\_\_\_ 14. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an object that holds multiple items of data.

a. arrangement

b. series

c. insertion

d. sequence

\_\_\_\_\_\_\_ 15. A bounding box of an object is made up of the objects \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

a. width and height

b. x and y

c. x\_change and y\_change

d. radius

\_\_\_\_\_\_\_ 16. Each element in a tuple has a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that specifies its position in the tuple.

a. catalog

b. key

c. index

d. reference

\_\_\_\_\_\_\_ 17. The coordinates (0, 0) is also called, the screens \_\_\_\_\_\_\_\_\_.

 a. origin

 b. axis

 c. center point

 d. size

\_\_\_\_\_\_\_ 18. The built-in function \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ returns the length of a sequence.

a. size

b. len

c. length

d. char

\_\_\_\_\_\_\_ 19. In the bouncing rectangle program, if rect\_change\_x is negative and rect\_change\_y is positive, which way will the rectangle travel?

 a. up and right

 b. up and left

 c. down and left

 d. down and right

\_\_\_\_\_\_\_ 20. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ method is commonly used to add items to a list.

a. add

b. append

c. continue

d. concat

\_\_\_\_\_\_\_ 21. What would be the value of the variable list after the execution of the following code?

list = [1, 2, 3, 4]

list[2] = 10

a. [1, 2, 3, 10]

b. [1, 2, 10, 4]

c. [1, 10, 10, 10]

d. invalid code, it cannot be change.

\_\_\_\_\_\_\_ 22. This is a proper file extension of a pygame sound.

a. .wav

 b. .mp3

c. .mp4

 d. All of the above

\_\_\_\_\_\_\_23. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a span of items that are taken from a sequence.

a. slice

b. group

c. set

d. index

\_\_\_\_\_\_\_ 24. What code will draw a rectangle from x, y coordinates (0, 0) to (100, 100)?

 a. pygame.draw.rect(BLUE, screen, 0, 0, 100, 100, 5)

 b. pygame.draw.rect(screen, BLUE, 0, 0, 100, 100, 5)

 c. pygame.draw.rect(screen, BLUE, [0,0,100,100], 5)

 d. pygame.draw.rect(screen, BLUE, [0, 0], [100, 100], 5)

\_\_\_\_\_\_\_ 25. What symbol matches this order of objects: Lists, Tuples, Strings, and Dictionaries?

a. [], (), {}, “”

b. (), {}, [], “”

c. (), “”, [], {}

d. [], (), “”, {}

\_\_\_\_\_\_\_ 26. What color would be defined by (0, 0, 255)?

 a. red

 b. blue

 c. green

 d. random color

\_\_\_\_\_\_\_ 27. This is the last index in a list.

a. 1

b. 99

c. 0

d. The size of the list minus one

\_\_\_\_\_\_\_ 28. In a rectangle bouncing program, if rect\_change\_x is positive and rect\_change\_y is zero, which way will the rectangle travel?

 a. up

 b. down

 c. left

 d. right

\_\_\_\_\_\_\_ 29. In a dictionary, you use a(n) \_\_\_\_\_ to locate a specific value.

a. datum

b. key

c. item

d. element

\_\_\_\_\_\_\_ 30. The third number in slicing brackets represents the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value.

a. start

b. end

c. step

d. character

\_\_\_\_\_\_\_ 31. To avoid KeyError exceptions, you can check whether a key is in the dictionary using the \_\_\_\_\_ operator.

a. included

b. of

c. in

d. not in

\_\_\_\_\_\_\_ 32. This code is used to retrieve and store a sprites width and height?

 a. get\_window

 b. get\_size

 c. get\_box

 d. get\_area

\_\_\_\_\_\_\_ 33. Which is not a function of the pygame.draw method?

 a. rect

 b. circle

 c. triangle

 d. polygon

\_\_\_\_\_\_\_ 34. Which of the following codes will get the current mouse position and returns the position as a list of two numbers

a. pos = pygame.mouse.get\_position()

 b. pos = pygame.mouse.get\_location()

 c. pos = pygame.mouse.get\_loc()

 d. pos = pygame.mouse.get\_pos()

\_\_\_\_\_\_\_ 35. Which is the proper color numbers for light grey?

 a. 255,255,255

 b. 200,200,200

 c. 50,50,50

 d. 0,0,0

Part Two: Short answer and code

1. What are the main differences between string, tuples, list, and dictionaries?

Code Country

2. What is the first line in every program that uses Pygame, this allows the pygame module into the pygame namespace?

3. This sets the pygame.Surface (window size) to 400 x 300.

4. This deactivates the pygame library and is called before terminating the program

5. This initializes all the pygame modules so that they can be used.

6. Write the code to color the entire background a shade of dark gray.

7. Add an image of an Crusadert into a variable

8. Place the picture of the Crusader to the screen.

9. Write the function that adds a specified background music file called, Final Countdown.

10. Let’s hear, the Final Coutdown