Python Functional Programming
130 Questions

NAME : _____

CLASS : _____

DATE : _____

1. What is Python?

A. It is a high-level and general-purpose programming language

B. It is a low-level and general-purpose programming language.

C. It is a high-level and only object-oriented programming language.

D. It is a high-level and general-purpose app.

2. Python was created in __ by __.

A. 1991 / Guido Van Rossum

B. 2000/ Guido Van Rossum

C. 2000 / Python Software Foundation

D. 1991 / Guide Van Rossum

3. Python is NOT __.

A. powerful

B. faster than Java

C. easy-to-use

D. flexible

4. Python is dynamic.

A. True

B. False

5. Which type of Programming does Python support?

A. object-oriented programming

B. structured programming

C. all of the mentioned

D. functional programming

6. Which of the following is the correct extension of the Python file?

A .py

B .pi

C .p

D .python

7. Which of the following best describes the Python and keyword

A It's used to create an alias

B It's used for debugging

C It's used to break out of a loop

D It's a logical operator

8. Which of the following best describes the Python break keyword

A It's used to create an alias

B It's used to break out of a loop

C It's a logical operator

D It's used for debugging

9. Which of the following best describes the Python def keyword

A It's used in conditional statements

B It's used to define a function

C It's used to defined a class

D It's used to delete an object

10. Which of the following best describes the Python None keyword

A It's used to define a function

B It's used to represents a null value

C it's a null statement, a statement that will do nothing

D It's used to create an anonymous function

11. Which of the following is a python keyword?

A True

B not

C if

D All

12. Which module prints all python keywords?

A keyword

B keyswords

C keywords

D words

13. Identify the invalid variable name

A salary____

B s_a_l_a_r_y

C s1a2l3a4r5y6

D sal&ary

14. Which function is used to find the type of a value?

A type()

B id()

C input()

D print()

15. Which operator is used for exponent?

A *

B $

C **

D ^

16. What does the following comparison operator "==" represent in Python programming?

A Not equal to.

B Equal to

C Allocation

D Assignment

17. What does the following comparison operator "!=" represent in Python programming?

A Assignment

B Equal to

C Not equal to.

D Allocation

18. What is the result of the following condition if x = 3?
not(x < 5 and x < 10)

A False

B True

19. What is the result of the following condition if:
A = 30
B = 21
C = 71
(A > B and A > C) or B < C

A False

B True

20. What is the result of the following condition if:
A = 30
B = 21
C = 71
not(B < A and B < C)

A True

B False

21. What is the result of the following condition if:
A = 30
B = 21
C = 71
B != A or C < A

A True

B False

22. Which of the following declarations is incorrect in python language?

A x,y,z,p = 5000, 6000, 7000, 8000

B xyzp = 5,000,000

C x_y_z_p = 5,000,000

D x y z p = 5000 6000 7000 8000

23. Which of the following words cannot be a variable in python language?

A val

B try

C _val

D *_try*

24. What are the values of the following Python expressions?
2**(3**2)
(2**3)**2
2**3**2

A 64, 512, 64

B 64, 64, 64

C 512, 64, 512

D 512, 512, 512

25. What will be the output of the following Python function?
len(["hello",2, 4, 6])

A 6

B 3

C 4

D Error

26. What will be the output of the following Python code?
print("abc. DEF".capitalize())

A Abc. Def

B Abc. def

C abc. def

D ABC. DEF

27. The second part of if, that is executed when the condition is false

A input

B else

C if

D for

28.
```
1  spam = 13
2  if spam > 7:
3      print("more than 7")
4  if spam > 23:
5      print("more than 23")
```
What is the output?

A spam

B 7

C more than 23

D more than 7

29. If you want to test more than one condition (chained condition), what do you use after if statement?

A elif

B else

C else if

D ifif

30. Which character must be at the end of the line for if?

A .

B {

C :

D ;

31. What symbol do you use to make a comment in Python?

A ;

B #

C ¬

D @

32.
```
chem_grade = 80
math_grade = 94
engl_grade = 76

if chem_grade >= 80:
    print("Success")
else:
    print("Failure")
```

What will be printed to the screen?

A Failure

B Nothing

C Success
Failure

D Success

33.

```
chem_grade = 80
math_grade = 94
engl_grade = 76

if chem_grade >= 80 and engl_grade > 80:
    print("Success")
elif math_grade >= 90:
    print("Part way there!")
else:
    print("Failure")
```

What will be printed to the screen?

A Failure

B Part of the way there!

C Success

D Nothing

34.

```
chem_grade = 80
math_grade = 93
engl_grade = 76

if chem_grade >= 80 and engl_grade > 80:
    print("Success")
elif math_grade >= 90 or engl_grade > 70:
    print("Part way there!")
else:
    print("Failure")
```

What will be printed to the screen?

A Nothing

B Failure

C Part of the way there!

D Success

35.

```
chem_grade = 80
math_grade = 93
engl_grade = 76

if chem_grade >= 80 and engl_grade > 80:
    print("Success")
elif math_grade >= 90 or engl_grade > 70:
    print("Part way there!")
else:
    print("Failure")
```

What will be printed to the screen?

A Part of the way there!

B Nothing

C Success

D Failure

36.

```
letter = 'a'
newletter = ord(letter) + 3
newletter = chr(newletter)
print(newletter)
```

What will be the output of the code displayed?

37.
```
letter = 'a'
newletter = ord(letter) + 1
newletter = chr(newletter)
print(newletter)
```
What is the output from the following code?

38.
```
letter = 'f'
newletter = ord(letter) + 8
newletter = chr(newletter)
print(newletter)
```
What is the output from the following code?

39.
```
def rotate(letter, key):
  new = ord(letter) + key
  new = chr(new)
  return new

new = rotate('a', 4)
print(new)
```
What is the output from the following code?

40.
```
letter = g
if letter.islower():
  print("This letter is lowercase.")
else:
  print("This letter is not lowercase.")
```
What is the output of the following code?

41.
```
def rotate(letter, key):
  if letter.islower():
    new = ord(letter) + key
    new = chr(new)
  else:
    new = letter
  return new

new = rotate('T', 4)
print(new)
```
What is the output from the following code?

42.

```
def rotate(letter, key):
  if letter.islower():
    new = ord(letter) + key
    new = chr(new)
  else:
    new = letter
  return new

new = rotate('g', 1)
print(new)
```

What is the output from the following code?

43.

```
def rotate(letter, key):
  if letter.islower():
    new = ord(letter) + key
    ??????????
  else:
    new = letter
  return new
```

What is the missing line of code?

A	new = ord(new)	B	print new
C	new = chr(new)	D	new = chr(letter)

44.

```
letter = input("Letter: ")
key = input("Key: ")
if letter.islower():
  print("Lowercase. Checking the new ord value...")
  new = ord(letter) + int(key)
  ????????????
    print("We've rotated past 'z'!")
```

What is the missing line of code?

A	if new > chr('z'):	B	if new > ord('z'):
C	If new =< ord('z'):	D	else next:

45.

```
for i in range(0,21) :
    if i % 2 != 0 :
        print ( i)
```

The program above

A prints all even numbers between 1 and 20

B prints all the odd numbers between 1 and 20

C print all the odd numbers between 1 and 21

D prints all the even numbers between 1 and 21

46.

```
numbers = range(1,11)

for number in numbers :
    print (number, end=" ")
```

The equivalent of the above for loop using the while syntax would be

A
```
number = 1

while number <= 11 :
    print ( number , end=" ")
    number = number + 1
```

B
```
number = 1

while number <= 12 :
    print ( number , end=" ")
    number = number + 1
```

C
```
number = 1

while number < 11 :
    print ( number , end=" ")
    number = number + 1
```

D
```
number = 1

while number < 12 :
    print ( number , end=" ")
    number = number + 1
```

47.

```
numbers = range(1,11)

for number in numbers :
    print (11-number , end=" ")
```

The above program prints

A Numbers 1 to 11 in reverse order

B Numbers 1 to 11

C Numbers 1 to 10

D Numbers 1 to 10 in reverse order

48.

```
for number in range(101) :
    if number % 5 == 0 :
        print ( number , end=" ")
```

The program above prints

A Numbers between 1 and 101 that are multiples of 5

B Numbers between 1 and 100

C Numbers between 1 and 100 that are multiples of 5

D Numbers between 1 and 100 divisible by 5

49.

```
for number in range(30) :
    if number % 5 == 0 :
        continue
    print ( number , end= " ")
```

The code above prints all numbers between 1 and 30 that are

A not divisible by 5

B divisible by 5

50.

```
sum = 0 # holds the initial sum value

for number in range(101) :
    if number % 2 == 0 :
        continue
    sum = sum + number

# after the for loop, print the sum
print ( sum )
```

The program above prints the sum of

A all odd numbers less than 100

B all numbers less than 100

C all even numbers less than 100

51.

```
sum = 0
alternate = True

for number in range(101) :
    if number % 2 == 0 :
        continue

    if alternate == True :
        sum = sum + number
        alternate = False
        continue

    alternate = True

print ( sum )
```

The program above prints the sum of all the numbers between 0 and 101 that are

A alternate odd numbers

B alternate even numbers

C alternate numbers

52.

```
for i in range(1,11) :
    for count in range(0,i) :
        print ( i, end=" ")
    print ()
```

The program above prints each number between 1 and 10

A 11 times

B 10 times

C as many times as the number itself

53.

```
for i in range(1,11) :
    count = i
    while count > 0 :
        print ( i, end=" ")
        count = count - 1
    print ()
```

The program above prints each number between 1 and 10

A 10 times

B as many times as the number itself

C 11 times

54.

```
for i in reversed(range(1,20,2)) :
    if i % 3 == 0 :
        print ( 1 )
```

How many times will 1 be printed

A 5

B 6

C 4

D 3

55. for i in 100 :
print (i)

A prints numbers 1 to 100

B prints numbers 0 to 99

C prints numbers 0 to 100

D Syntax error

E prints numbers 1 to 99

56.

```
sum = 0.5
for i in range(5) :
    if i % 2 == 0 :
        sum = int ( sum + i )
        print ( "even ", sum)
    else :
        sum = sum + i
        print ( "odd", sum)

print ( sum)
```

What is the output of the program above

A 18

B 10

C 15

D 16

E 17

57.

```
for i in range(1,100,5):
    print ( i )
```

A while loop equivalent of the for loop above is

A

```
i = 1
while i < 100 :
    print ( i )
    i = i + 5
```

B

```
i = 0
while i <= 100 :
    print ( i )
    i = i + 5
```

C

```
i = 0
while i < 100 :
    print ( i )
    i = i + 5
```

D

```
i = 1
while i <= 100 :
    print ( i )
    i = i + 5
```

58.

```
sum = 0
numbers_1 = [1, 2, 3, 6, 4, 5, 1, 2, 5]
numbers_2 = [3, 6, 2, 6, 1, 5, 1, 6, 5]

for index, number in enumerate(numbers_1) :
    if numbers_1[index] == numbers_2[index] :
        sum = sum + 10
    else :
        sum = sum + abs ( numbers_1[index] - numbers_2[index] )
```

What is the value of the variable sum after the code above executes

A 34

B 74

C 44

D 64

E 54

59.

```
num = 2
for i in range(5):
    print (num, "+", num,"=",(num + num))
    num = num + num
```

What does this program print

A 2 + 2 = 42 + 4 = 62 + 6 = 82 + 8 = 10

B 2 + 2 = 4 2 + 2 = 4 2 + 2 = 4 2 + 2 = 4 2 + 2 = 4

C 2 + 2 = 42 + 2 = 42 + 2 = 42 + 2 = 4

D 2 + 2 = 4 2 + 4 = 6 2 + 6 = 8 2 + 8 = 10 2 + 10 = 12

E 2 + 2 = 4 4 + 4 = 8 8 + 8 = 16 16 + 16 = 32 32 + 32 = 64

60. What is a variable?

A Data type

B a type of memory

C A box(memory location) where you store values

D a type of graphics

61. What symbol is used in python to assign values to a variable?

A equals =

B asterisk *

C plus +

D forward slash /

62. What will be the output?
name = "Dave"
print (name)

A Dave

B 'Dave'

C name

D (name)

63. Which statement correctly assigns the string "Tanner" to the variable name?

A name = input("Tanner")

B name = print("Tanner")

C input("Tanner")

D name = "Tanner"

64. What does the print function do in python?

A It's a variable.

B It displays an output

C It loops the code.

D It can input data.

65.
```
city = "Exeter"
```
In the following code, "city" is an example of a what?

A Variable

B Array

C Loop

D List

66. The correct way to write a variable in Python?

A my_variable = 10

B my_variable is 10

C my variable = 10

D my_variable: 10

67. In python the ' INTEGER data type' can be defined as...?

A holds whole numbers

B holds numbers with a decimal point

C holds alphanumeric data as text

D holds either ‘true’ or ‘false’

68. what is correct code for INTEGER in python?

A in

B ing

C int

69. In programming, what is iteration?

A A decision point in a program

B Testing a program to make sure it works

C The order in which instructions are carried out

D The repetition of steps within a program

70. Which two statements are used to implement iteration?

A IF and WHILE

B ELSE and WHILE

C IF and ELSE

D FOR and WHILE

71. FOR loops are

A not part of programming

B loops which run an unknown number of times

C the same as if statements

D loops which run for a specific number of times

72. WHILE loops are

A the same as if statements

B loops which run for a specific number of times

C not part of programming

D loops which run an unknown number of times

73. Which kind of loop would be used?

I need a guessing game program that will let me keep guessing until I get the right answer.

A FOR Loop

B WHILE Loop

74. Which kind of loop would be used?

I need a revision program that will run through revision questions 4 times.

A WHILE Loop

B FOR Loop

75. A: Strings can be changed during execution
B. Strings can be enclosed within single, double or even triple quotes
C. Strings are immutable

A A,C are True but B is False

B A,B & C are True

C A,B are True but C is False

D B, C are True but A is False

76. Find the output of the following code:
>>>str1='Save Soil'
>>>str1.isalnum( )

A Save Soil

B True

C False

77. Identify the string membership operators of Python

A between, not between

B as, not as

C like, not like

D in, not in

78. The title( ) function

A assigns title

B returns string in title case

C returns the title of the file

79. Predict the output:
>>>str1="Rajathi Raja"
>>>print(str1.count('Raja'))

A 1

B 2

C Raja

D Error

80. Predict the output:
>>>saint="Thiruvalluvar"
>>>print(saint[5:])

A uvalluvar

B valluvar

C Thiru

D Thiruvalluvar

81.
```
city = "Exeter"
letter = city[3]
print(letter)
```
What letter will be printed on the screen after running this code:

A e

B t

C x

D Nothing prints

82. Which of the operator can be used in Strings?

A None of the above

B *

C +

D Both of the above

83. word = "amazing"
For the given string if we run word[2:5] what does it mean?

A It will extract alphabets from index 2 to index 4

B It will extract alphabets from index 2 to index 5

C It will extract alphabets from position 2 to position 4

D It will extract alphabets from position 2 to position 5

84. word = "amazing"
For the given string if we run word[2:5:2] what does 2 mean in this function?

A It will pick every alternate alphabet

B It will pick only two alphabets

C It will pick only second alphabet

D It will pick first two alphabets

85. Which method is used to convert a given string in Capital letters?

A ConverttoUpper

B Capital

C Capitalize

D Upper

86. s1="Hello"
n1=10
print(s1+n1)
What is the error in this code?

A string cannot be added to a number

B Numeric value not written in quotes

C Print statement not written in quotes

D colon not written after the print statement

87. s1="Hello"
s2="10"
print(s1+n1)
What is the error in this code?

A String cannot be multiplied with a string

B String 2 written in quotes

C colon not written after print statement

D Number written in quotes

88. Lists are?

A Mutable

B immutable

89. fruit1="kiwi"
fruit2="strawberry"
print(len(fruit1))
print(len(fruit2))

A 410

B 4 10

C kiwi and strawberry

D 410

90. slicing string X="BOnVoyage"
print X[0:5]

A BOnVoy

B BOnVo

C bonvo

D oyage

91. Slicing string
x="BOnvoyage
print(x[4:])

A BOnvo

B VOYAGE

C voyage

D bonvo

92. a="god help those who help themselves"
"help" in "a"

A error
B wrong out put
C true
D false

93. Which keyword is used for function?*

A function
B def
C define
D fun

94. Which of the following items are present in the function header?

A function name
B parameter list
C Both A and B
D return value

95. If the return statement is not used inside the function, the function will return:

A Arbitary value
B Null
C 0
D None

96. In which part of memory does the system store the parameter and local variables of a function call?

A stack
B None of the above
C heap
D Uninitialized data segment

97. What will be the output of the following Python expression? round(4.576)

A 5
B 4.6
C 4
D 4.5

98. Which statement is correct to import all modules from the package

A from package include *

B from package import all

C from package include all

D from package import *

99. What is returned by math.ceil(3.4)?

A 3.0

B 3

C 4.0

D 4

100.
```
def myFunction(x, y):
    return x + y

myFunction(3, 2)
```

What will print?

A an error message

B nothing

C 5

D 6

101.
```
def myFunction(x, y):
    return x + y

z=myFunction(3, 2)
print(z)
```

What will print?

A an error message

B 5

C nothing

D 6

102.
```
def myFunction(x, y):
    return x + y

z=myFunction(3, myFunction(4,5) )
print(z)
```

What will print?

A 12

B z

C 7

D nothing

103.
```
def surprise():
    print("Boo")

for x in range(1,5):
    surprise()
```

How many times will Boo print?

A	none	B	5
C	1	D	4

104.
```
def study(x, y):
    print(x+y*2)

study(1,2)
```

What will print?

A	3	B	5
C	1 2	D	1

105. What term is used to describe data passed into a function?

A	Parameter	B	Variable
C	Loop	D	Constant

106. Leo wants to create a function that will roll a dice. Which is the correct function definition header?

A	def diceroll []:	B	def dice roll ():
C	def diceroll ()	D	def diceroll ():

107.
```
def draw_circle():
  tracy.circle(50)
```

Write the line of code that will call the function.

108. Write the line of code that will define the function, draw_coin

109. Do you call or define a function first?

A call

B define

110.
```
def draw_heart:
```

Correctly rewrite this line of code!

111.
```
def draw_triangle()
```

Correctly rewrite this line of code !

112.
```
def drawCircle():
  tracy.circle(50)

drawCircle
```

Rewrite the line of incorrect code using Camel Case to make it correct!
Hint: The mistake is when the function gets called

113.

```
def playerScore(number):
  number += 1


score = playerScore(0)
print(score)
```

The process of creating a function is as follows
1. Use the keyword def to declare the function
2. Follow with defining the function name
3. Add parameters to the function: they should be within the parentheses() of the function.
4. End this line with a colon after the parenthesis.
5. Indent and then add the statements that the functions should execute
6. Include a return statement if the function should output something. Without the return statement, your function will return an object - None
What is missing from this function?

A return value statement

B Function definition

C Parameters

D Variable

114.

```
def addOne(number):
  number += 1
  return number

one = addOne(0)
two = addOne(one)
print(two)
```

What will be the output of this program?

A 3

B 2

C 0

D 1

E 4

115. The parameters could be a

A	Variable	B	Expression
C	Function	D	Literal

116.
```
data = 10
def my_function():
    print(data)
    data = 20
    print(data)

print(data)
```
What is the output of the given code?

A	10	B	10 20 10
C	20	D	10 20

117.
```
def study(x, y=3):
    print(x+y*2)

study(1)
```
What will print?

A	an error message	B	7
C	5	D	4

118.
```
def study(x, y):
    print(x+y*2)

study(y=1,x=2)
```
What will print?

A	4	B	5
C	an error message	D	nothing

119.

```
def myFunction(x, y):
    return x + y

z=myFunction(3, 2)
print(x)
```

What will print?

A 5

B nothing

C an error message

D 6

120.

```
def myFunction(x, y):
    print(x, y)
    return x + y

z=myFunction(3, 2)
```

What will print?

A 3 2

B an error message

C 5

D 6

121.

```
def sayHi( ):          #line 1
    print("hi there") #line 2
                       #line 3
sayHi( )               #line 4
```

What will print?

A an error message

B nothing

C sayHi()

D hi there

122.

```
def sayHi( ):          #line 1
    print("hi there") #line 2
                       #line 3
sayHi( )               #line 4
```

Which of the following best describes the order in which these lines are processed in Python?

A 3, 1, 2

B 1, 2, 3, 4

C 4, 2, 1

D 4, 1, 2

123.

```
#What will print ?
mice = 2
cats=1
if cats > 1:
    print ("cats eat mice")
elif cats < 1:
    print ("mice get away")
else:
    print ("unknown")
```

What will print ?

A unknown

B error message

C mice get away

D cats eat mice

124.

```
def traffic_report(light):
    if light == 'red':
          return 'stop'
    elif light == 'yellow':
          return 'slow'
    elif light == 'green':
          return 'go'
print(traffic_report('orange'))
```

Predict the output

A go

B stopslowgo

C slow

D None

125.

```
number1 = 100
def funct1(x):
      global number1
      number1 = 200
      number1 = number1**x
print(number1, end=' ')
funct1(2)
print(number1)
```

Predict the output.
Note: end=' ' is a single space.

126. Choose the correct function declaration of fun1() so that we can execute the following function call successfully:
fun1(25, 75, 55)
fun1(10, 20)

A def fun1(args*)

B def fun1(*data)

C No, it is not possible in Python

D def fun1(**kwargs)

127. Select which is true for Python function

A. A Python function can return only a single value

B. Python function doesn't return anything unless and until you add a return statement

C. A Python function can return multiple values

D. A function can take an unlimited number of arguments

128.

```
def fn():
        global s
        s=20
        print(s, end= ' ')
fn()
print(s)
```

Predict the output.
Note: end= ' ' is a single space.

A. 20 NameError

B. Can't say

C. 20 20

D. NameError

129.

```
def display(**kwargs):
      for i in kwargs.items():
            print(i, end= ' ')

display(cls='XII', test='UT1')
```

Predict the output.
Note: end=' ' is a single space

A. 'XII' 'UT1'

B. 'cls' 'test'

C. ('cls', 'XII') ('test', 'UT1')

D. {'cls': 'XII'} {'test': 'UT1'}

130.

```
def add(a, b):
    return a+5, b+5

result = add(3, 2)
print(result)
```

What is the output of the add() function call

A. Syntax Error

B. 8

C. (8,7)

D. 15

Answer Key

1.a	2.a	3.b	4.a
5.c	6.a	7.d	8.b
9.b	10.b	11.d	12.a
13.d	14.a	15.c	16.b
17.c	18.a	19.b	20.b
21.a	22.d	23.b	24.c
25.c	26.b	27.b	28.d
29.a	30.c	31.b	32.d
33.b	34.c	35.a	36.d
37.b	38.n	39.e	40.This letter is lowercase.
41.T	42.h	43.c	44.b
45.b	46.c	47.d	48.
49.a	50.a	51.a	52.c
53.b	54.d	55.d	56.b
57.a	58.e	59.e	60.c
61.a	62.a	63.d	64.b
65.a	66.a	67.a	68.c
69.d	70.d	71.d	72.d
73.b	74.b	75.d	76.c
77.d	78.b	79.a	80.b
81.b	82.d	83.a	84.a
85.c	86.a	87.a	88.a
89.d	90.b	91.c	92.c

93.b	94.c	95.d	96.c
97.b	98.d	99.d	100.b
101.b	102.a	103.d	104.b
105.a	106.d	107.draw_circle()	108.def draw_coin():
109.b	110.def draw_heart():	111.def draw_triangle():	112.drawCircle()
113.a	114.b	115.a	116.a
117.b	118.a	119.c	120.a
121.d	122.d	123.a	124.d
125.100 40000	126.b	127.	128.c
129.c	130.c		