Python MCQs

Spurthi 2k20

3rd and 4th Years

Set 4

1. What is tail recursion?

a) A recursive function that has two base cases

b) A function where the recursive functions leads to an infinite loop

c) A recursive function where the function doesn’t return anything and just prints the values

d) A function where the recursive call is the last thing executed by the function

2. Observe the following Python code?

def a(n):

if n == 0:

return 0

else:

return n\*a(n - 1)

def b(n, tot):

if n == 0:

return tot

else:

return b(n-2, tot-2)

a) Both a() and b() aren’t tail recursive

b) Both a() and b() are tail recursive

c) b() is tail recursive but a() isn’t

d) a() is tail recursive but b() isn’t

3. What will be the output of the following Python code?

def f():

global a

print(a)

a = "hello"

print(a)

a = "world"

f()

print(a)

a)

hello

hello

world

b)

world

hello

hello

c)

hello

world

world

d)

world

hello

world

4. What will be the output of the following Python code?

def f1(a,b=[]):

b.append(a)

return b

print(f1(2,[3,4]))

a) [3,2,4]

b) [2,3,4]

c) Error

d) [3,4,2]

5. What will be the output of the following Python function?

list(enumerate([2, 3]))

a) Error

b) [(1, 2), (2, 3)]

c) [(0, 2), (1, 3)]

d) [(2, 3)]

6. What will be the output of the following Python functions?

x=3

eval('x^2')

a) Error

b) 1

c) 9

d) 6

7. What will be the output of the following Python code?

def change(one, \*two):

print(type(two))

change(1,2,3,4)

a) Integer

b) Tuple

c) Dictionary

d) An exception is thrown

8. If a function doesn’t have a return statement, which of the following does the function return?

a) int

b) null

c) None

d) An exception is thrown without the return statement

9. Tuples can’t be made keys of a dictionary.

a) True

b) False

10. Is the following Python code valid?

>>> a=2,3,4,5

>>> a

a) Yes, 2 is printed

b) Yes, [2,3,4,5] is printed

c) No, too many values to unpack

d) Yes, (2,3,4,5) is printed

11. What will be the output of the following Python function?

{x for x in 'abc'}

{x\*3 for x in 'abc'}

a)

{abc}

aaa

bbb

ccc

b)

abc

abc abc abc

c)

{‘a’, ‘b’, ‘c’}

{‘aaa’, ‘bbb’, ‘ccc’}

d)

{‘a’, ‘b’, ‘c’}

abc

abc

abc

12. The output of the following code is: class<’set’>.

type({})

a) True

b) False

13. The \_\_\_\_\_\_\_\_\_\_\_\_ function removes the first element of a set and the last element of a list.

a) remove

b) pop

c) discard

d) dispose

14. The difference between the functions discard and remove is that:

a) Discard removes the last element of the set whereas remove removes the first element of the set

b) Discard throws an error if the specified element is not present in the set whereas remove does not throw an error in case of absence of the specified element

c) Remove removes the last element of the set whereas discard removes the first element of the set

d) Remove throws an error if the specified element is not present in the set whereas discard does not throw an error in case of absence of the specified element

15. What will be the output of the following Python code snippet?

a = [0, 1, 2, 3]

for a[-1] in a:

print(a[-1])

a) 0 1 2 3

b) 0 1 2 2

c) 3 3 3 3

d) error

16. What will be the output of the following Python code snippet?

a = [0, 1, 2, 3]

for a[0] in a:

print(a[0])

a) 0 1 2 3

b) 0 1 2 2

c) 3 3 3 3

d) error

17. What will be the output of the following Python code?

print('a'.maketrans('ABC', '123'))

a) {97: 49, 98: 50, 99: 51}

b) {65: 49, 66: 50, 67: 51}

c) {97: 49}

d) 1

18. What will be the output of the following Python code?

print('abcdef'.partition('cd'))

a) (‘ab’, ‘ef’)

b) (‘abef’)

c) (‘ab’, ‘cd’, ‘ef’)

d) 2

19. What will be the output of the following Python code snippet?

print('xyyxyyxyxyxxy'.replace('xy', '12', 100))

a) xyyxyyxyxyxxy

b) 12y12y1212x12

c) none of the mentioned

d) error

20. What will be the output of the following Python code snippet?

print('abcdefcdghcd'.split('cd'))

a) [‘ab’, ‘ef’, ‘gh’]

b) [‘ab’, ‘ef’, ‘gh’, ”]

c) (‘ab’, ‘ef’, ‘gh’)

d) (‘ab’, ‘ef’, ‘gh’, ”)

21. What will be the output of the following Python code snippet?

print('abcd'.translate({97: 98, 98: 99, 99: 100}))

a) bcde

b) abcd

c) error

d) none of the mentioned

22. What will be the output of the following Python code snippet?

print('abcd'.translate({'a': '1', 'b': '2', 'c': '3', 'd': '4'}))

a) abcd

b) 1234

c) error

d) none of the mentioned

23. What will be the output of the following Python code snippet?

print('abcd'.translate('a'.maketrans('abc', 'bcd')))

a) bcde

b) abcd

c) error

d) bcdd

24. What will be the output of the following Python code?

def change(i = 1, j = 2):

i = i + j

j = j + 1

print(i, j)

change(j = 1, i = 2)

a) An exception is thrown because of conflicting values

b) 1 2

c) 3 3

d) 3 2

25. What will be the output of the following Python code?

l=[]

def convert(b):

if(b==0):

return l

dig=b%2

l.append(dig)

convert(b//2)

convert(6)

l.reverse()

for i in l:

print(i,end="")

a) 011

b) 110

c) 3

d) Infinite loop