PCAP-ähnlicher Test
65 Minuten für 40 Fragen

Frage 1:
What is the expected output of the following code (There are no spaces)?

```
x = """
"""
print(len(x))
```

a) 0

b) 2

c) 1

d) The code is erroneus

Antwort:

Frage 2:
What is the expected output of the following code?

```
x = 9
y = 12
result = x // 2 * 2 / 2 + y % 2 ** 3
print(result)
```

4.0f 12 % 8

/ => float

a) 7.0

b) 9.0

c) 8

d) 8.0

Antwort:

Frage 3:
What is the expected output of the following code?

```
vect = ["alpha", 'bravo', "charlie"]
new_vect = filter(lambda s: s[-1].upper() in ['A', 'O'], vect)
for x in new_vect:
    print(x[1], end="")
```

a) LR

b) RH

c) lr

d) rh

Antwort:

Frage 4:
You know that a function named func() resides in a module named mod.
The module has been imported using the following line:

```
import mod
```

How do you invoke the function?

a) mod::func()

b) func()

c) mod.func()

d) mod-.func()

Antwort:

Frage 5:
Assuming that the following code has been executed successfully, indicate the expressions which evaluate to True and do not raise exceptions.

```
class Collection:
    stamps = 2

    def __init__(self, stuff):
        self.stuff = stuff

    def dispose(self):
        del self.stuff

binder = Collection(1)
binder.dispose()
```

a) 'stuff' in binder.__dict__

b) len(binder.__dict__) != len(Collection.__dict__)

c) 'stamps' in Collection.__dict__

d) len(binder.__dict__) > 0

__dict__ der Instanz ist beim Erzeugen leer und danach mit Instanzv. gefüllt

Antwort:

Frage 6:
What is the expected output of the following code?

```
num = 1
def func():
    num = 3
    print(num, end= ' ')

func()
print(num)
```

a) 3 1

b) 1 3

c) The code is erroneous.

d) 3 3

Antwort:

assert → false

Frage 7:
The following statement...

```
1 assert x == 0
```

a) will stop the program if x is equal to 0
b) will stop the program if x is not equal to 0
c) is erroneous.
d) has no effect

Antwort:

Frage 8:
Which of the following are true?
(Select two answers.)

a) The print() function writes its output to the stdout stream.
b) The open() function returns False when its operation fails.
c) stdin, stdout, stderr are names of pre-opened streams.
d) The second argument of the open() function is an integer value.

Antwort:

Frage 9:
What is the expected output of the following code?

```
1 print('one' 'two')
```

a) The code is erroneous.
b) one
c) onetwo
d) two

Antwort:

Frage 10:
Which of the following functions returns the operating system's release version?

a) platform.python_version_tuple
b) platform.platform()
c) platform.version()
d) platform.machine()

Antwort:

Frage 11:
What is the expected output of the following code?

```
class Ceil:
    Token = 1
    def get_token(self):
        return 1

class Floor(Ceil):
    def get_token(self):
        return 2
    def set_token(self):
        pass

holder= Floor()
print(hasattr(holder, "Token"), hasattr(Ceil, "set_token"))
```

a) False True
b) True False
c) False False
d) True True

Antwort:

Frage 12:
What is the expected output of the following code
if there is no file named non_existing_file in the working directory/folder, and the open() function invocation is successful?

```
try:
    f = open("non_existing_file", "w")
    print(1, end=" ")
    s = f.readline()
    print(2, end=" ")
except IOError as error:
    print(3, end=" ")
else:
    f.close()
    print(4, end=" ")
```

w kann nur schreiben

a) 1 2 4

b) 1 2 3 4

c) 2 4

d) 1 3

Antwort:

Frage 13:
What is the expected output of the following code:

```
class A:
    def __init__(self, v=2):
        self.v = v
    def set(self, v=1):
        self.v += v
        return self.v

a = A()
b = a
b.set()
print(a.v)
```

a) 3

b) 0

c) 1

d) 2

Antwort:

Frage 14:
A code point is:

a) A number which makes up a character.

b) A code containing a point.

c) A point used to write a code.

d) None of the above.

Antwort:

Frage 15:
The part of your code where the handling of an exception takes place should be placed inside:

a) the except: branch.

b) the exception: branch.

c) the try: branch.

d) None of the above.

Antwort:

Frage 16:
Consider the following code:

```
for n in range(1, 6, 1):
    print( ??? * 5)
```

What would you insert instead of ???
so that the program prints the following pattern on the monitor?

```
11111
22222
33333
44444
55555
```

a) 1

b) 2

c) n

d) str(n)

Antwort:

Frage 17:
Which of the following function calls can be used to invoke the below function definition?

```
def test(a,b,c,d):
```

Choose three.

a) test(1, 2, 3, 4)

b) test(1, 2, 3, d=4)

c) test(a=1, b=2, c=3, 4)

d) test(a=1, b=2, c=3, d=4)

Antwort:

Frage 18:
If the class's constructor is declared below, which of the assignments is valid?

```
class Class:
    def __init__(self):
        pass
```

a) Object = Class(object)

b) object = Class()

c) object = Class(self)

d) object = Class

Antwort:

Frage 19:
What is the expected output of the following code:

```
data = [[0,1,2,3] for i in range(2)]
print(data[2][0])
```

a) 0

b) The code is erroneus.

c) 1

d) 2

Antwort:

Frage 20:
Which of the following variable names is illegal?

a) true

b) True

c) TRUE

d) _True

Antwort:

Frage 21:
How many stars will the following code print to the monitor?

```
1  x=1
2  while x<10:
3      print('*')
4      x = x << 1
```

a) one

b) two

c) four

d) eight

8 4 2 1

Antwort:

Frage 22:
The += operator, when applied to strings, performs:

a) Concatenation

b) Multiplication

c) TRUE

d) _True

Antwort:

Frage 23:
Consider the following code:

```
import random
data = [10, 20, 30]
x = random.choice(data)
```

Which of the following statements best describes the behavior of the random.choice() method?

a) It chooses one random element from data.

b) This function is a placeholder and yet to be implemented.

c) It deletes one random element from data.

d) It shuffles the elements for the number of times equal to the size of the list.

Antwort:

Frage 24:
What is the expected output of the following code:

```
x = 1 + 1 // 2 + 1 / 2 + 2
print(x)
```

a) 4

b) 4.0

c) 3

d) 3.5

Antwort:

Frage 25:
Is there a way to check if a class is a subclass of another class?

a) Yes, there is a function that can do that.

b) No.

c) It may be possible, but only under special conditions.

d) None of the above.

Antwort:

Frage 26:
What is the expected output of the following code:

```
def func(data):
    g = ""
    for d in data[::2]:
        g += d
    return g
for x in func('abcdef'):
    print(x, end="")
```

a) abcdef

b) An empty line.

c) ace

d) bdf

Antwort:

Frage 27:
Which of the following is false?

a) A try statement can have one or more except clauses.

b) A try statement can have a finally clause and an except clause.

c) A try statement can have one or more finally clauses.

d) A try statement can have a finally clause without an except clause.

Antwort:

Frage 28:
What is the expected output of the following code:

```
class Aircraft:
    def start(self):
        return "default"
    def take_off(self):
        self.start()

class FixedWing(Aircraft):
    pass

class RotorCraft(Aircraft):
    def start(self):
        return "spin"

fleet = [FixedWing(), RotorCraft()]
for airship in fleet:
    print(airship.start(),end=" ")
```

a) spin default

b) spin spin

c) default default

d) default spin

Antwort:

Frage 29:
What is the expected output of the following code:

```
with open("data.txt", "w") as f:
    f.write("Text is text")

with open("data.txt", "r") as f:
    data = f.readlines()
    for line in data:
        words = line.split()
        print(words)
```

a) Text is text

b) The code is erroneous.

c) ['Text', 'is', 'text']

d) T

Antwort:

Frage 30:
Select the true statements. Choose two.

a) A lambda function can evaluate multiple expressions.

b) A lambda function can evaluate only one expression.

c) A lambda function can accept a maximum of two arguments

d) A lambda function can accept any number of arguments.

Antwort:

Frage 31:
How many stars will the following code print to the monitor?

```
i = 0
while i < i + 2:
    i += 1
    print('*')
else:
    print('*')
```

a) one

b) zero

c) two

d) The snippet will enter an infinite loop.

Antwort:

Frage 32:
Consider the following code:

```
x = 1
x = x == x
```

The value eventually assigned to x is equal to:

a) False

b) 1

c) True

d) 0

Antwort:

Frage 33:
What is the expected output of the following code?

```
print(float("1.3"))
```

a) 1,3

b) 1.3

c) The code is erroneous.

d) 13

Antwort:

Frage 34:
What is the expected output of the following code?

```
data = "abcdefg"
def func(text):
    del text[2]
    return text
print(func(data))
```

a) abdefg

b) abcefg

c) The code is erroneous.

d) acdefg

Antwort:

Frage 35:
What is true about object-oriented programming (OOP)? (Select two answers.)

a) A class is like a blueprint used to construct objects.

b) A class may exist without its objects, while objects cannot exist without their class.

c) A relation between superclass and its subclass is known as fraternity.

d) Polymorphism is a phenomenon which allows you to have many classes of the same name.

Antwort:

Frage 36:
What value will be assigned to the x variable?

```
x = 55
x = str(x + 5)
x *= 2 + 1
```

a) 60601

b) The code is erroneous

c) 555555555

d) 606060

Antwort:

Frage 37:
What is the expected output of the following code?

```
class Test:
    def __init__(self, s):
        self.s = s
    def print(self):
        print(s)

x = Test("Hello Python")
x.print()
```

a) Hello Python

b) AttributeError: 'Test' object has no attribute 's'

c) NameError: name 's' is not defined

d) TypeError: Test( ) takes no arguments

Antwort:

Frage 38:
What is the expected output of the following code?

```
strng = "John,Doe,42"
strng = "".join(strng.split(","))
print(strng[-2])
```

a) 4

b) e

c) 2

d) ;

Antwort:

Frage 39:
What is the expected output of the following code?

```
plane = "Blackbird"
counter = 0
for c in plane + 2:
    if c in ["1", "2"]:
        counter +=1
print(counter)
```

a) 0

b) 4

c) 2

d) The code is erroneous

Antwort:

Frage 40:
Which of the following expressions evaluates to True and raises no exception? (Select two answers.)

a) ' ' in ' alphabet'
b) ' xyz ' not in ' uvwxyz '
c) ' ' not in ' '
d) ' b ' in 'abc '

Antwort: