Begonnen am	Wednesday, 10. November 2021, 12:04
Status	Beendet
Beendet am	Wednesday, 10. November 2021, 12:14
Verbrauchte Zeit	10 Minuten 31 Sekunden
Punkte	25,00/25,00
Bewertung	**10,00** von 10,00 (**100**%)

Frage 1

Vollständig

Nicht bewertet

By selecting "I confirm", I hereby declare under oath that I will work on this examination on my own without any help or any third-party assistance.
By selecting "I confirm", I understand that noncompliance results in invalidation of the assessment, whereby the invalidated examination will be added to the total number of retakes and noncompliance may result in further legal action.

- ○ a. I confirm
- ○ b. I do not confirm

Die richtige Antwort ist: I confirm

Frage 2

Richtig

Erreichte Punkte 1,00 von 1,00

After the execution of the following code, which statement would be correct?

```
a = 2
b = 3
c = 1
def fun(a, b):
    c = a * 2 + b
    return c

c = fun(a=1, b=2)
```

- ○ a. The value of variable "c" is 4. ✔
- ○ b. We would receive an error message (UnboundLocalError).
- ○ c. The value of variable "c" is 1.
- ○ d. The value of variable "c" is 7.

Die richtige Antwort ist: The value of variable "c" is 4.

Frage 3

Richtig

Erreichte Punkte 1,00 von 1,00

The line

```
1 is 1.0
```

would return

- ○ a. False because these are two different objects (integer and float objects) ✔
- ○ b. True because the numerical values of the integer and float objects are equal
- ○ c. None because we successfully assign the value 1.0 to the variable "1"
- ○ d. An error because we try to assign the value 1.0 to the variable "1"

Die richtige Antwort ist: False because these are two different objects (integer and float objects)

Frage 4

Richtig

Erreichte Punkte 1,00 von 1,00

After the lines

```
a = (1, 2, 3)
a = list(a)
```

- ○ a. "a" would reference a tuple object
- ○ b. we would receive an error message that tuples are immutable
- ○ c. we would receive an error message that variable "a" is already of type tuple
- ○ d. "a" would reference a list object ✔

Die richtige Antwort ist: "a" would reference a list object

Frage 5

Richtig

Erreichte Punkte 1,00 von 1,00

Which of the following statements is NOT correct?

- ○ a. A Python function can optionally return a value.
- ○ b. A Python function must always explicitly return a value. ✔
- ○ c. A Python function can return different values, even of different datatypes.
- ○ d. A Python function can have multiple "return" statements.

Die richtige Antwort ist: A Python function must always explicitly return a value.

Frage 6

Richtig

Erreichte Punkte 1,00 von 1,00

Assume variable "var" references a list. The line

```
var[2:]
```

would

- ○ a. fail because '2:' is not a valid integer index
- ◉ b. return all list elements except for the elements at index 0 and 1 ✔
- ○ c. return every second list element
- ○ d. return all list elements before the one at index 2

Die richtige Antwort ist: return all list elements except for the elements at index 0 and 1

Frage 7

Richtig

Erreichte Punkte 1,00 von 1,00

What does a "byte" refer to?

- ○ a. It refers to 2 bits
- ○ b. It refers to 1 bit (it's a synonym)
- ○ c. It refers to 32 or 64 bits, depending on the operating system
- ◉ d. It refers to 8 bits ✔

Die richtige Antwort ist: It refers to 8 bits

Frage 8

Richtig

Erreichte Punkte 1,00 von 1,00

Which of the following statements is NOT correct?

- ○ a. A recursive function is still called as such if the recursive call happens indirectly (through other, intermediate function calls).
- ○ b. A recursive function can have multiple ends of recursion (recursion anchors).
- ○ c. A recursive function can potentially be executed indefinitely (endless recursion).
- ◉ d. A recursive function must have an end of recursion (recursion anchor), it is enforced by Python. ✔

Die richtige Antwort ist: A recursive function must have an end of recursion (recursion anchor), it is enforced by Python.

Frage 9

Richtig

Erreichte Punkte 1,00 von 1,00

After the line

```
a = 4.0
```

the variable "a" will reference to

- ○ a. a float object with value four ✔
- ○ b. two integer objects with value four and zero
- ○ c. an integer object with value four
- ○ d. an integer object with value forty

Die richtige Antwort ist: a float object with value four

Frage 10

Richtig

Erreichte Punkte 1,00 von 1,00

Which of the following lines would create a list in Python?

- ○ a. (1, 2, 3, 4)
- ○ b. def l(1, 2, 3, 4):
- ◉ c. [1, 2, 3, 4] ✔
- ○ d. 1, 2, 3, 4

Die richtige Antwort ist: [1, 2, 3, 4]

Frage 11

Richtig

Erreichte Punkte 1,00 von 1,00

What does the "raise" keyword do?

- ○ a. raise a child process to an adult state
- ○ b. increment ("raise") the value of an integer by 1
- ◉ c. activate ("raise") an exception ✔
- ○ d. increase ("raise") the line-number of a file-handle

Die richtige Antwort ist: activate ("raise") an exception

Frage 12

Richtig

Erreichte Punkte 1,00 von 1,00

Putting code inside of a "try"-block will let you...

- ○ a.   simulate a run of the code within the "try"-block in the debugger without actually changing the variable contents.
- ⦿ b.   catch exceptions that are raised within the "try"-block using the "except" keyword.   ✔
- ○ c.   execute code within the "try"-block and if it fails, provide you with more detailed help (docstrings) and a logfile.
- ○ d.   write symbolic code within the "try"-block that will be automatically compiled into Python syntax.

Die richtige Antwort ist: catch exceptions that are raised within the "try"-block using the "except" keyword.

Frage 13

Richtig

Erreichte Punkte 1,00 von 1,00

The line

```
list(range(5))
```

would

- ⦿ a.   return a list of integers from 0 to 5, excluding the 5   ✔
- ○ b.   return a list of 5 random integer numbers
- ○ c.   return a list with only one element, which is the sum of integers 0 to 5
- ○ d.   return a list with only one element, which is the integer 5

Die richtige Antwort ist: return a list of integers from 0 to 5, excluding the 5

Frage 14

Richtig

Erreichte Punkte 1,00 von 1,00

The code

```
a = [str(i) for i in range(3)]
```

will

- ○ a.   create a set {"0", "1", "2"}
- ○ b.   create a tuple ("0", "1", "2")
- ○ c.   fail because this is not valid Python
- ⦿ d.   create a list ["0", "1", "2"]   ✔

Die richtige Antwort ist: create a list ["0", "1", "2"]

Frage 15

Richtig

Erreichte Punkte 1,00 von 1,00

After the execution of the following code, which statement would be correct?

```
a = 2
b = 3
c = 1
def fun(a, b):
    c = a * 2 + b
    return c

c = fun(a=a, b=b)
```

- ○ a.   The value of variable "c" is 8.
- ○ b.   We would receive an error message (UnboundLocalError).
- ◉ c.   The value of variable "c" is 7.   ✔
- ○ d.   The value of variable "c" is 1.

Die richtige Antwort ist: The value of variable "c" is 7.

Frage 16

Richtig

Erreichte Punkte 1,00 von 1,00

Which output, if any, would be generated by the following code?

```
true = True
false = False
if false:
    print("First output!")
elif false:
    print("Second output!")
elif false:
    print("Third output!")
else:
    print("Last output!")
```

- ◉ a.   "Last output!"   ✔
- ○ b.   No output would be generated
- ○ c.   "First output!" "Second output!" "Third output!"
- ○ d.   "First output!" "Second output!" "Third output!" "Last output!"

Die richtige Antwort ist: "Last output!"

Frage 17

Richtig

Erreichte Punkte 1,00 von 1,00

After the line

```
a = "4"
```

the variable "a" will

- ○ a. reference a bool object
- ○ b. reference a float object
- ● c. reference a string object ✓
- ○ d. reference an integer object

Die richtige Antwort ist: reference a string object

Frage 18

Richtig

Erreichte Punkte 1,00 von 1,00

Which of the following lines would create a comment in Python?

- ○ a. % This is a comment
- ● b. # This is a comment ✓
- ○ c. && This is a comment
- ○ d. -- This is a comment

Die richtige Antwort ist: # This is a comment

Frage 19

Richtig

Erreichte Punkte 1,00 von 1,00

Python code is typically stored in...

- ● a. text files that could be opened by any text editor ✓
- ○ b. compressed files that cannot be edited after creation
- ○ c. encrypted files that need to be decrypted before opening them
- ○ d. dedicated files that can only be opened by Python editors

Die richtige Antwort ist: text files that could be opened by any text editor

Frage 20

Richtig

Erreichte Punkte 1,00 von 1,00

Given a function

```
def add(a, b=1):
    c = a + b
    return c
```

which of the following lines would NOT be correct?

- a. result = add(1, b=2)
- b. result = add(1, 2)
- c. result = add(1)
- d. result = add(a=2, 1) ✔

Die richtige Antwort ist: result = add(a=2, 1)

Frage 21

Richtig

Erreichte Punkte 1,00 von 1,00

The line

```
(1, 'a', 1.0)
```

would

- a. create a list containing an integer 1, a string 'a', and a float 1.0
- b. create a dictionary containing an integer 1, a string 'a', and a float 1.0
- c. fail since list and tuple elements have to have the same data type, which is not the case here
- d. create a tuple containing an integer 1, a string 'a', and a float 1.0 ✔

Die richtige Antwort ist: create a tuple containing an integer 1, a string 'a', and a float 1.0

Frage 22

Richtig

Erreichte Punkte 1,00 von 1,00

Given a function

```
def add(a, b):
    c = a + b
    return c
```

which of the following lines would NOT be correct?

- a. result = add(1, b=2)
- b. result = add(1, 2)
- c. result = add(b=2, a=1)
- d. result = add(1) ✔

Die richtige Antwort ist: result = add(1)

Frage 23

Richtig

Erreichte Punkte 1,00 von 1,00

Assuming "a", "b", and "c" are referencing float objects, the line

```
a + b * c + b
```

will

- a. add the value of "a" to the product of the values of "b" and "c" and to the value of "b" ✔
- b. fail because there are too many operators in one statement
- c. multiply the sum of the values of "a" and "b" with sum of the values of "c" and "b"
- d. add the product of the values of "a" and "b" to the product of the values of "c" and "b"

Die richtige Antwort ist: add the value of "a" to the product of the values of "b" and "c" and to the value of "b"

Frage 24

Richtig

Erreichte Punkte 1,00 von 1,00

The code

```
while True:
    print("x")
```

will

- a. print "x" indefinitely (endless loop) ✔
- b. fail because True cannot be used as loop condition
- c. not produce any output
- d. print "x" one time because True is equivalent to integer value 1

Die richtige Antwort ist: print "x" indefinitely (endless loop)

Frage 25

Richtig

Erreichte Punkte 1,00 von 1,00

What does a "bit" refer to?

- ○ a. It represents a logical state with one of two possible values. ✔
- ○ b. It represents 1 byte (it's a synonym).
- ○ c. It refers to 8 bytes.
- ○ d. It refers to 32 or 64 bytes, depending on the operating system

Die richtige Antwort ist: It represents a logical state with one of two possible values.

Frage 26

Richtig

Erreichte Punkte 1,00 von 1,00

The line

```
a == b
```

would

- ○ a. assign the object referenced to by variable "b" to variable "a".
- ○ b. assign the object referenced to by variable "a" to variable "b".
- ○ c. check if variables "a" and "b" reference objects with the same numerical value. ✔
- ○ d. check if variables "a" and "b" reference the same object.

Die richtige Antwort ist: check if variables "a" and "b" reference objects with the same numerical value.

Direkt zu: