

Aarhus Universitet, Science and Technology, Computer Science

Exam

Introduction to Programming with Scientific Applications

Tuesday 11 June 2019, 14:00–16:00

Allowed aid: **None**

The exam questions are answered on the problem statement that is handed in at the end of the exam

*Tilladte hjælpemidler: **Ingen***

Eksamensspørgsmålene besvares på opgaveformuleringen, som afleveres ved eksamenens slutning

Student ID/*årskort* _____

Name/*navn* _____

Information

The exam consists of a set of multiple-choice questions. The questions are answered on the problem statement **that is handed in**. For each question is stated the weight of the question compared to the full exam. Each sub-question has exactly one correct answer. You can select **at most one** answer for each sub-question, by marking the corresponding box with a cross. A sub-question is scored as follows:

- Marking the correct answer gives you 1 point.
- If you do not mark any answer you get 0 points.
- Marking a wrong answer gives you $-\frac{1}{k-1}$ point, where k is the number of answer options.

For a question with weight $v\%$ containing n sub-questions, where you score a total of s points, your score for the question will be $\frac{s}{n} \cdot v\%$. Note that is possible to get a negative score for a question.

*Dette eksamenssæt består af en mængde multiple-choice-opgaver. Opgaverne besvares på opgaveformuleringen **som afleveres**. For hver opgave er angivet opgavens andel af det samlede eksamenssæt. Hvert delspørgsmål har præcist et rigtigt svar. For hvert delspørgsmål, må man vælge **max ét svar** ved at afkrydse den tilsvarende rubrik. Et delspørgsmål bedømmes som følgende:*

- *Hvis du sætter kryds ved det rigtige svar, får du 1 point.*
- *Hvis du ikke sætter nogen krydser, får du 0 point.*
- *Hvis du sætter kryds ved et forkert svar, får du $-\frac{1}{k-1}$ point, hvor k er antal svar-muligheder.*

For en opgave med vægt $v\%$ og med n delspørgsmål, hvor man opnår samlet s point, beregnes pointene for besvarelse af opgaven som $\frac{s}{n} \cdot v\%$. Bemærk at det er muligt at få negative point for en opgave.

Python version

In the following Python refers to Python 3.7.

I det følgende antages at Python refererer til Python 3.7.

Question 1 (Expressions, 4 %)

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	0	0.0	1	1.0	ZeroDivisionError
0 / 1	☐ A 13%	☒ B 79%	☐ C 1%	☐ D 0%	☐ E 2%
1 / 0	☐ A 0%	☐ B 2%	☐ C 0%	☐ D 0%	☒ E 97%
0 // 1	☒ A 91%	☐ B 2%	☐ C 1%	☐ D 0%	☐ E 1%
1 // 0	☐ A 3%	☐ B 0%	☐ C 2%	☐ D 0%	☒ E 89%
1 # 0	☐ A 1%	☐ B 0%	☒ C 25%	☐ D 2%	☐ E 5%
0 # 1	☒ A 27%	☐ B 3%	☐ C 0%	☐ D 0%	☐ E 1%
1 % 0	☐ A 6%	☐ B 0%	☐ C 22%	☐ D 0%	☒ E 52%
0 % 1	☒ A 68%	☐ B 2%	☐ C 11%	☐ D 0%	☐ E 2%

Question 2 (Conditional, 4 %)

```
def f(x):
    if x < 0:
        x = -x
    elif x == -1:
        x = 2
    else:
        x = 2 * x
    return x
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	-5	-4	-3	-2	-1	0	1	2	3	4	5
f(-2)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 1%	☐ E 0%	☐ F 0%	☐ G 0%	☒ H 96%	☐ I 0%	☐ J 1%	☐ K 0%
f(-1)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☒ G 67%	☐ H 31%	☐ I 0%	☐ J 0%	☐ K 0%
f(0)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☒ F 100%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%
f(1)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 1%	☒ H 98%	☐ I 0%	☐ J 0%	☐ K 0%
f(2)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☒ J 100%	☐ K 0%

Question 3 (Boolean operations, 4 %)

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	True	False	0	1	2	3	ZeroDivisionError
True and False	☐ 4%	☒ 94%	☐ 0%	☐ 0%	☐ 0%	☐ 0%	☐ 0%
not True	☐ 3%	☒ 91%	☐ 0%	☐ 0%	☐ 0%	☐ 0%	☐ 0%
1 == 2 and 3	☐ 1%	☒ 84%	☐ 0%	☐ 0%	☐ 0%	☐ 9%	☐ 0%
1 == 2 or 3	☐ 9%	☐ 11%	☐ 0%	☐ 0%	☐ 2%	☒ 69%	☐ 0%
1 == 2 == 3	☐ 0%	☒ 91%	☐ 0%	☐ 0%	☐ 0%	☐ 2%	☐ 0%
3 < 2 > 1 / 0	☐ 2%	☒ 68%	☐ 0%	☐ 0%	☐ 0%	☐ 0%	☐ 23%

Question 4 (Dictionaries, 4 %)

`D = { 'a key': 'a value' }`

Which of the below are valid dictionary updates ?

Hvilke af nedenstående er lovlige "dictionary" opdateringer ?

	Valid/Lovlig	Invalid/Ulovlig
<code>D['Python'] = 3</code>	☒ 88%	☐ 2%
<code>D[(1, 2)] = 3</code>	☒ 54%	☐ 18%
<code>D[[1, 2]] = 3</code>	☐ 20%	☒ 51%
<code>D[{1, 2}] = 3</code>	☐ 9%	☒ 57%
<code>D[frozenset({1, 2})] = 3</code>	☒ 43%	☐ 15%
<code>D[None] = True</code>	☒ 29%	☐ 40%

Question 5 (for loops, 4 %)

```
for x in range(1, 4):
    for y in range(x, 4):
        print(str(x) + str(y), end= ' ')
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

- 11 22 33 12 23 13 ☐ A 0%
- 11 22 22 33 33 33 ☐ B 0%
- 11 12 13 22 23 33 ☒ C 98%
- 13 12 11 23 22 33 ☐ D 0%
- 11 14 44 44 ☐ E 0%

Question 6 (List indexing, 4 %)

```
x = ['a', 'b', 'c']
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	'a'	'b'	'c'	[]	['a']	['b']	['c']	['a','b']	['b','c']	IndexError
x[1]	☐ A 0%	☒ B 89%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 8%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%
x[1:1]	☐ A 0%	☐ B 2%	☐ C 0%	☒ D 84%	☐ E 0%	☐ F 3%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 6%
x[1:2]	☐ A 0%	☐ B 27%	☐ C 0%	☐ D 0%	☐ E 1%	☒ F 64%	☐ G 0%	☐ H 0%	☐ I 4%	☐ J 0%
x[-2]	☐ A 4%	☒ B 78%	☐ C 0%	☐ D 0%	☐ E 1%	☐ F 9%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 2%
x[:-2]	☐ A 22%	☐ B 2%	☐ C 0%	☐ D 2%	☒ E 54%	☐ F 1%	☐ G 0%	☐ H 6%	☐ I 3%	☐ J 3%
x[1::2]	☐ A 0%	☐ B 21%	☐ C 0%	☐ D 1%	☐ E 0%	☒ F 52%	☐ G 2%	☐ H 0%	☐ I 4%	☐ J 6%
x[3]	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 3%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☒ J 96%

Question 7 (Lists, 4 %)

```
A = [[1,2],[3,4]]
B = A
B[1] = 5
C = A[:]
C[1] = 6
A[0][0] = 7
```

What is the value of A, B and C after executing the above code ?

Hvad er værdien af A, B og C efter udførelsen af ovenstående kode ?

	[[7,2],[3,4]]	[[1,2],5]	[[7,2],5]	[[1,2],6]	[[7,2],6]
A	☐ 7%	☐ 0%	☒ 85%	☐ 0%	☐ 4%
B	☐ 0%	☐ 13%	☒ 82%	☐ 0%	☐ 2%
C	☐ 0%	☐ 0%	☐ 0%	☐ 71%	☒ 26%

Question 8 (List comprehension, 4 %)

```
print([x + x for x in [[1, 2], [3, 4]]])
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

[4, 6]	☐ 0%
[3, 6]	☐ 0%
[2, 4, 6, 8]	☐ 9%
[1, 2, 1, 2, 3, 4, 3, 4]	☐ 2%
[[1, 2, 1, 2], [3, 4, 3, 4]]	☒ 85%
[[1, 2, 3, 4], [1, 2, 3, 4]]	☐ 2%

Question 9 (Function call, 4 %)

```
def f(x, y, z):
    return x + 2 * y - z
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	-2	-1	0	1	2	3	4	5	6	7	SyntaxError/ TypeError
f(1, 2, 3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☒ E 99%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%
f(1, z=2, y=3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 2%	☐ F 0%	☐ G 1%	☒ H 81%	☐ I 0%	☐ J 0%	☐ K 9%
f(x=1, 2, 3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 88%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☒ K 10%
f(z=1, y=2, x=3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 2%	☒ I 85%	☐ J 0%	☐ K 7%
f(1, 2, x=3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 3%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☒ K 94%

Question 10 (Recursion, 4 %)

```
def f(x):
    return 0 if x == 0 else x + f(x - 1)
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	-1	0	1	2	3	4	5	6	7	8	9	RecursionError
f(-1)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%	☒ L 97%
f(0)	☐ A 0%	☒ B 100%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%	☐ L 0%
f(1)	☐ A 0%	☐ B 0%	☒ C 100%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%	☐ L 0%
f(2)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☒ E 96%	☐ F 1%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%	☐ L 0%
f(3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☒ H 95%	☐ I 1%	☐ J 0%	☐ K 0%	☐ L 0%

Question 11 (Scope, 4 %)

```
def fn(x):
    def fn(x):
        return 2 * fn(x - 1) if x > 1 else 1
    return fn(x) + fn(x - 1)
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	0	1	2	3	4	5	6	7	8	9	10	RecursionError
fn(1)	☐ A 0%	☐ B 9%	☒ C 68%	☐ D 2%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%	☐ L 8%
fn(2)	☐ A 0%	☐ B 0%	☐ C 2%	☒ D 59%	☐ E 6%	☐ F 0%	☐ G 3%	☐ H 0%	☐ I 0%	☐ J 1%	☐ K 0%	☐ L 5%
fn(3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☐ F 0%	☒ G 41%	☐ H 5%	☐ I 6%	☐ J 11%	☐ K 1%	☐ L 7%

Question 12 (Recursive data, 4 %)

```
def flip(tree):
    if type(tree) is not tuple:
        return tree
    else:
        return tuple(flip(c) for c in reversed(tree))

print(flip((((1,2),3),4,(5,(6,7)))))
```

What does the above program print?

Hvad udskriver ovenstående program?

- ☐ A 6%
((5, (6, 7)), 4, ((1, 2), 3))
- ☒ B 77%
(((7, 6), 5), 4, (3, (2, 1)))
- ☐ C 2%
(((7, 6), 5), 4, (3, (1, 2)))
- ☐ D 7%
(((6, 7), 5), 4, (3, (1, 2)))
- ☐ E 1%
((((7, 6), 5), 4, 3), (2, 1))

Question 13 (Generators, 4 %)

```
def a(n):
    for x in range (1, n + 1):
        yield x * x

def b(a):
    for x in a:
        yield x
        yield x * x

print(list(b(a(3))))
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

- ☐ A 0%
[1, 2, 3, 1, 4, 9]
- ☐ B 9%
[1, 4, 9, 1, 16, 81]
- ☐ C 2%
[1, 1, 2, 4, 3, 9]
- ☒ D 81%
[1, 1, 4, 16, 9, 81]
- ☐ E 0%
[(1, 1), (2, 4), (3, 9)]
- ☐ F 3%
[(1, 1), (4, 16), (9, 81)]

Question 14 (Generator expression, 4 %)

```
g = (x**2 for x in range(1, 5))

print(next(g), end=' ')
for e in g:
    print(e, end=' ')
print(list(g))
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

- | | | |
|--------------------------|-------------------------------------|-----|
| 1 1 4 9 16 [1, 4, 9, 16] | ☐ A | 3% |
| 1 1 4 9 16 [4, 9, 16] | ☐ B | 6% |
| 1 1 4 9 16 [] | ☐ C | 0% |
| 1 4 9 16 [1, 4, 9, 16] | ☐ D | 5% |
| 1 4 9 16 [4, 9, 16] | ☐ E | 22% |
| 1 4 9 16 [] | ☒ | 59% |

Question 15 (lambda, 4 %)

```
def partial(f, *args):
    return lambda *more_args : f(*args, *more_args)

def linear(a, b, x):
    return a + b * x

f = partial(linear, 1)
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

- | | 5 | 7 | TypeError |
|------------|-------------------------------|---|---|
| f(2, 3) | ☐ A | ☒ 13% 54% | ☐ C 12% |
| f(1, 2, 3) | ☐ A 0% | ☐ B 16% | ☒ 55% |

Question 16 (Class, 4 %)

```
class A():
    x = 0

    def __init__(self, x=1):
        self.x = x

a = A()
b = A(x=2)
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	0	1	2	NameError
a.x	☐ A 9%	☒ B 74%	☐ C 0%	☐ D 1%
a.__class__.x	☒ A 27%	☐ B 1%	☐ C 0%	☐ D 38%
b.x	☐ A 0%	☐ B 1%	☒ C 78%	☐ D 3%
A.x	☒ A 54%	☐ B 13%	☐ C 0%	☐ D 11%

Question 17 (Inheritance, 4 %)

```
class A:
    def f(self, x):
        return self.g(x) * self.g(x)

    def g(self, x):
        return x + 1

class B(A):
    def g(self, x):
        return x - 1
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	0	1	2	3	4	5	6	7	8	9	10	AttributeError
A().f(2)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 4%	☐ F 0%	☐ G 4%	☐ H 0%	☐ I 0%	☒ J 82%	☐ K 0%	☐ L 2%
B().f(2)	☐ A 0%	☒ B 64%	☐ C 0%	☐ D 1%	☐ E 1%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 9%	☐ K 0%	☐ L 10%
A().g(2)	☐ A 0%	☐ B 0%	☐ C 0%	☒ D 90%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 1%	☐ K 0%	☐ L 0%
B().g(2)	☐ A 0%	☒ B 87%	☐ C 1%	☐ D 2%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%	☐ L 0%

Question 18 (Sorted, 4 %)

```
S = [{1, 2}, {3, 4}, {2}, {2, 3}, {1}, {2, 1}, {1, 1}]
S = { frozenset(s) for s in S }
S = sorted(S, key=sorted)
S = [ set(s) for s in S ]
print(S)
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

- | | |
|--|---|
| [{1}, {2}, {1, 2}, {2, 3}, {3, 4}] | ☐ A 14% |
| [{1}, {1, 2}, {2}, {2, 3}, {3, 4}] | ☒ B 20% |
| [{1}, {1, 1}, {1, 2}, {2}, {2, 3}, {3, 4}] | ☐ C 11% |
| [{1}, {2}, {1, 1}, {1, 2}, {2, 3}, {3, 4}] | ☐ D 9% |
| [{1}, {1, 1}, {1, 2}, {1, 2}, {2}, {2, 3}, {3, 4}] | ☐ E 11% |
| [{1}, {2}, {1, 1}, {1, 2}, {1, 2}, {2, 3}, {3, 4}] | ☐ F 9% |

Question 19 (Decorator, 4 %)

```
def adjust(f):
    return lambda x: 1 + f(x - 1)

@adjust
def square(x):
    return x ** 2
```

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	0	1	2	3	4	5	6	7	8	9	10
square(1)	☐ A 0%	☒ B 92%	☐ C 1%	☐ D 0%	☐ E 0%	☐ F 0%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%
square(2)	☐ A 0%	☐ B 0%	☒ C 76%	☐ D 2%	☐ E 10%	☐ F 1%	☐ G 0%	☐ H 0%	☐ I 0%	☐ J 0%	☐ K 0%
square(3)	☐ A 0%	☐ B 0%	☐ C 0%	☐ D 0%	☐ E 0%	☒ F 77%	☐ G 0%	☐ H 1%	☐ I 0%	☐ J 6%	☐ K 2%

Question 20 (float, 4 %)

```
def f(alpha):
    apx = 1.0
    i = 1
    while True:
        if apx == apx + alpha ** i:
            break
        apx += alpha ** i
        i += 1
    return apx
```

f tries to approximate $\sum_{i=0}^{\infty} \alpha^i = \frac{1}{1-\alpha}$ for $|\alpha| < 1$.

What is the result of each of the below expressions ?

f forsøger at beregne en tilnærmelse til $\sum_{i=0}^{\infty} \alpha^i = \frac{1}{1-\alpha}$ for $|\alpha| < 1$.
Hvad er resultatet af hvert af nedenstående udtryk ?

	0.0	1.0	2.0	OverflowError	Infinite loop/ Uendelige løkke
$f(0.0)$	☐ A 4%	☒ B 85%	☐ C 0%	☐ D 0%	☐ E 3%
$f(0.5)$	☐ A 2%	☐ B 0%	☒ C 30%	☐ D 15%	☐ E 30%
$f(2.0)$	☐ A 0%	☐ B 0%	☐ C 0%	☒ D 40%	☐ E 38%

Question 21 (Exceptions, 4 %)

```
try:
    print('A', end='')
    x = 1 / 0
    print('B', end='')
except ZeroDivisionError:
    print('C', end='')
finally:
    print('D', end='')
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

ABC	ABCD	ABD	AC	ACD	AD
☐ A 0%	☐ B 4%	☐ C 4%	☐ D 0%	☒ E 86%	☐ F 2%

Question 22 (zip, 4 %)

```
print(list(zip(*enumerate(['a', 'b', 'c']))))
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

- | | |
|---|---|
| <code>[(0, 'a'), (1, 'b'), (2, 'c')]</code> | ☐ A 1% |
| <code>[('a', 'b', 'c'), (0, 1, 2)]</code> | ☐ B 5% |
| <code>[(0, 1, 2), ('a', 'b', 'c')]</code> | ☒ C 72% |
| <code>[(0, 'a'), (1, 'b'), (2, 'c')]</code> | ☐ D 11% |
| <code>[('a', 0), ('b', 1), ('c', 2)]</code> | ☐ E 1% |
| <code>[(0, 1, 2, 'a', 'b', 'c')]</code> | ☐ F 2% |
| <code>[('a', 'b', 'c', 0, 1, 2)]</code> | ☐ G 0% |

Question 23 (numpy, 4 %)

```
import numpy as np

a = np.array(range(4)).reshape((2, 2))
b = np.array(range(1, 3)).reshape((2, 1))

print(a @ b)
```

What does the above code print (newlines omitted) ?

Hvad udskriver ovenstående kode (linjeskift undladt) ?

- | | |
|------------------------|---|
| <code>[[4] [7]]</code> | ☐ A 2% |
| <code>[4 7]</code> | ☐ B 4% |
| <code>[[4 7]]</code> | ☐ C 2% |
| <code>[[2] [8]]</code> | ☒ D 49% |
| <code>[2 8]</code> | ☐ E 18% |
| <code>[[2 8]]</code> | ☐ F 2% |

Question 24 (Ordering, 4 %)

What is the result of each of the below expressions ?

Hvad er resultatet af hvert af nedenstående udtryk ?

	True	False	TypeError
<code>(3, 2) < (1, 4, 5)</code>	☐ 20%	☒ 20%	☐ 29%
<code>'coke' < 'pepsi'</code>	☒ 39%	☐ 6%	☐ 32%
<code>set('coke') < set('pepsi')</code>	☐ 15%	☒ 64%	☐ 4%
<code>{1, 3} < {1, 2, 3}</code>	☒ 79%	☐ 3%	☐ 2%
<code>{1, 3} < {1, 2}</code>	☐ 0%	☒ 80%	☐ 2%
<code>3 < 3.5</code>	☒ 84%	☐ 2%	☐ 5%
<code>3 < '3.5'</code>	☐ 0%	☐ 0%	☒ 94%

Question 25 (list, 4 %)

```
x = [0]
x[0] = x
x[0][0] = 1
print(x)
```

What does the above code print ?

Hvad udskriver ovenstående kode ?

[1]	[[1]]	[[...]]	[0, [1, [...]]]	[0, [1]]	IndexError
☒ 13%	☐ 42%	☐ 8%	☐ 3%	☐ 1%	☐ 18%