Problem 2 Final Exam 6.00.1x Courseware edX.pdf

Saved to Dropbox • Mar 15, 2017, 8:26 AM



MITx: 6.00.1x Introduction to Computer Science and

Programming Using Python

Home

Course

Discussion

Progress

Notes

Calendar

Help



barrybbarron



- Welcome to the edXPlatform
- EntranceSurvey
- DownloadPython andGet Motivated!

Set up your Coding Environment

Get into the MIT MIndset

Resources

- Week 1: Python Basics
- Week 2: SimplePrograms
- Week 3:StructuredTypes

Final Exam > Final Exam > Problem 2



Problem 2

☐ Bookmark this page

Problem 2-1

1 point possible (graded)

You have the following class hierarchy:

```
class A(object):
    def foo(self):
        print('hi')
class B(A):
    def foo(self):
        print('bye')
```

Which of the following is correct?

- \bigcirc When a = A() we say that a is an instance of A
- \bigcirc When b = B() we say that b is a subclass of A
- O Both of the above
- Neither of the above

Week 4: Good

Programming **Practices** You have used 0 of 1 attempt Submit Midterm Exam Problem 2-2 Week 5: Object 1 point possible (graded) Oriented Consider the function f below. What is its Big O complexity? **Programming** def f(n): Week 6: def g(m): Algorithmic m = 0Complexity for i in range(m): print(m) for i in range(n): Week 7: g(n)**Plotting Exit Survey Final Exam** Sandbox Submit You have used 0 of 1 attempt Problem 2-3 1 point possible (graded) A dictionary is an immutable object because its keys are immutable. True False because its keys can be mutable

O False because a dictionary is mutable

Submit

You have used 0 of 1 attempt

Problem 2-4

1 point possible (graded)

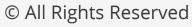
Consider the following two functions and select the correct choice below:

```
def foo_one(n):
    """ Assume n is an int >= 0 """
    answer = 1.0
    while n > 1:
        answer *= n
        n -= 1
    return answer

def foo_two(n):
    """ Assume n is an int >= 0 """
    if n <= 1:
        return 1.0
    else:
        return n*foo_two(n-1)</pre>
```

- O The worst case Big Oh time complexity of foo_one is worse than the worst case Big Oh time complexity of foo_two.
- O The worst case Big Oh time complexity of foo_two is worse than the worst case Big Oh time complexity of foo_one.
- O The worst case Big Oh time complexity of foo_one and foo_two are the same.
- Impossible to compare the worst case Big Oh time complexities of the two functions.

Problem 2-1 1 point possible (gra		
The complexity o	f	is
○ constant		
Ologarithmic		
Olinear		
O polynomial		
exponential		
Submit	have used 0 of 1 atter	
	Previous	Next >





About edX for Business Blog News Help Center Contact Careers Donate

Terms of Service & Honor Code Privacy Policy Accessibility Policy Sitemap Media Kit

© 2012-2017 edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.















