



Bookmarks

- ▶ Welcome to the edX Platform
- ▶ Entrance Survey
- ▶ Download Python and Get Motivated!
- ▶ Week 1: Python Basics
- ▶ Week 2: Simple Programs
- ▶ Week 3: Structured Types
- ▶ Week 4: Good Programming Practices
- ▼ **Midterm Exam**
Midterm Exam
Midterm due Feb 14, 2017 15:30 PST
- ▶ Sandbox

Midterm Exam > Midterm Exam > Problem 1

Problem 1

Bookmark this page

Problem 1-1

1.0 point possible (graded)

Suppose `x = "pi"` and `y = "pie"`. The line of code `x, y = y, x` will swap the values of `x` and `y`, resulting in `x = "pie"` and `y = "pi"`.

☐

True

☐

False

Submit

You have used 0 of 1 attempt

Problem 1-2

1.0 point possible (graded)

Suppose `x` is an integer in the following code:

```
def f(x):  
    while x > 3:  
        f(x+1)
```

For any value of `x`, all calls to `f` are guaranteed to never terminate.

☐

True

☐

False



You have used 0 of 1 attempt

Problem 1-3

1.0 point possible (graded)

A Python program always executes every line of code written at least once.

☐ True☐ False

You have used 0 of 1 attempt

Problem 1-4

1.0 point possible (graded)

Suppose you have two different functions that each assign a variable called `x`. Modifying `x` in one function means you always modify `x` in the other function for any `x`.

☐ True☐ False

You have used 0 of 1 attempt

Problem 1-5

1.0 point possible (graded)



The following code will enter an infinite loop for all values of `i` and `j`.

```
while i >= 0:
    while j >= 0:
        print(i, j)
```

☐ True

☐ False

Submit

You have used 0 of 1 attempt

Problem 1-6

1.0 point possible (graded)

It is always possible and feasible for a programmer to come up with test cases that run through every possible path in a program.

☐ True

☐ False

Submit

You have used 0 of 1 attempt

Problem 1-7

1.0 point possible (graded)

Assume `f()` is defined. In the statement `a = f()`, `a` is always a function.

☐ True



☐ False

You have used 0 of 1 attempt

Problem 1-8

1.0 point possible (graded)

A program that keeps running and does not stop is an example of a syntax error.

☐ True☐ False

You have used 0 of 1 attempt

Problem 1-9

1.0 point possible (graded)

Consider the following function.

```
def f(x):  
    a = []  
    while x > 0:  
        a.append(x)  
        f(x-1)
```

A new object of type list is created for each recursive invocation of `f`.

☐ True

☐ False

You have used 0 of 1 attempt

Problem 1-10

1.0 point possible (graded)

A tuple can contain a list as an element.

☐ True☐ False

You have used 0 of 1 attempt

© All Rights Reserved



© 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.

POWERED BY
OPENedX