Quiz: OOP (Practice Problems)

1 Classes and Attributes

Problem 1. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
4
       pass
5 \quad a = Foo()
6 a.message = 'hello world'
7 b = Foo()
8 b.message = 'hola mundo'
9 try:
10
       print('a.message=', a.message)
11 except AttributeError:
12
       print('AttributeError')
13 EOF
14 $ python3 foo.py
```

Problem 2. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ cat > foo.py <<EOF
3 class Foo:
4
       pass
5 \quad a = Foo()
6 b = Foo()
7
  b.message = 'hello world'
8 try:
       print('a.message=', a.message)
10 except AttributeError:
11
       print('AttributeError')
12 EOF
13 $ python3 foo.py
```

Problem 3. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
       message = 'salve munde'
4
5 \quad a = Foo()
6 b = Foo()
7 b.message = 'hola mundo'
8 trv:
9
       print('a.message=', a.message)
10 except AttributeError:
11
       print('AttributeError')
12 EOF
13 $ python3 foo.py
```

Problem 4. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ cat > foo.py <<EOF
3 class Foo:
4
       pass
5 \quad a = Foo()
6 b = Foo()
7 b.message = 'hola mundo'
   Foo.message = 'salve munde'
9 try:
10
       print('a.message=', a.message)
11 except AttributeError:
12
       print('AttributeError')
13 EOF
14 $ python3 foo.py
```

Problem 5. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ cat > foo.py <<EOF
3 class Foo:
       pass
4
5 \quad a = Foo()
6 a.message = 'hello world'
7 b = Foo()
8 b.message = 'hola mundo'
9 Foo.message = 'salve munde'
10 try:
11
       print('a.message=', a.message)
12 except AttributeError:
13
       print('AttributeError')
14 EOF
15 $ python3 foo.py
```

2 Constructors

Problem 6. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
$ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
       def __init__(self, message):
           self.message = message
6 = Foo('hello world')
7 b = Foo('hola mundo')
8
   try:
9
       print('a.message=', a.message)
10
  except AttributeError:
11
       print('AttributeError')
12 EOF
13 $ python3 foo.py
```

Problem 7. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
4
       def __init__(self, message):
           message = message
  a = Foo('hello world')
7
   b = Foo('hola mundo')
8 try:
       print('a.message=', a.message)
10 except AttributeError:
       print('AttributeError')
11
12 EOF
13 $ python3 foo.py
```

Problem 8. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3
   class Foo:
4
       message = 'salve munde'
5
       def __init__(self, message):
6
           message = message
7
  a = Foo('hello world')
8 b = Foo('hola mundo')
9
   try:
10
       print('a.message=', a.message)
11 except AttributeError:
12
       print('AttributeError')
13 EOF
14 $ python3 foo.py
```

Problem 9. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
4
       def __init__(self, message):
5
           Foo.message = message
  a = Foo('hello world')
7 b = Foo('hola mundo')
8
   trv:
9
       print('a.message=', a.message)
10
   except AttributeError:
11
       print('AttributeError')
12 EOF
13 $ python3 foo.py
```

Problem 10. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
4
       def __init__(self, message):
           Foo.message = message
  a = Foo('hello world')
7
   b = Foo('hola mundo')
8 Foo.message = 'salve mundo'
9 try:
10
       print('a.message=', a.message)
11 except AttributeError:
12
       print('AttributeError')
13 EOF
14 $ python3 foo.py
```

Problem 11. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3
  class Foo:
4
       def __init__(self, message):
5
           Foo.message = message
6
  a = Foo('hello world')
7 b = Foo('hola mundo')
8 b.message = 'salve mundo'
9
   try:
10
       print('a.message=', a.message)
11 except AttributeError:
12
       print('AttributeError')
13 EOF
14 $ python3 foo.py
```

2.1 Default Parameters

Problem 12. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2  $ cat > foo.py <<EOF
3 class Foo:
       def __init__(self, message=None):
           self.message = message
5
6 \quad a = Foo()
7 b = Foo('hola mundo')
8 try:
9
       print('a.message=', a.message)
10 except AttributeError:
11
       print('AttributeError')
12 EOF
13 $ python3 foo.py
```

Problem 13. Write the output of the final command in the following terminal session. If the command has no output, then leave the problem blank.

```
1 $ cd; rm -rf quiz; mkdir quiz; cd quiz
2 $ cat > foo.py <<EOF
3 class Foo:
4
       def __init__(self, message=None):
5
           if message:
6
                self.message = message
7 \quad a = Foo()
8 b = Foo('hola mundo')
9 try:
10
       print('a.message=', a.message)
11 except AttributeError:
12
       print('AttributeError')
13 EOF
14 $ python3 foo.py
```