

Instructions

This exam should be of equal difficulty if not harder than the exam you'll be taking on Thursday. You are welcome to use your notes as well as the internet to answer these questions but I encourage you not to do so as you will not have access to these resources during the real exam.

To receive the answer key to this exam you must either attend at least one SI session before the exam or you may email me your attempt and I'll send you the answer key.

I **will NOT** be posting this answer key online but you are welcome to share it with your peers, just remember that if you only look at the answer key, you really aren't studying and your grade will likely reflect that. Also, feel free to email me or ask me during SI, questions regarding specific questions on this practice exam.

The following section is a Multiple Choice Section. Each question will either ask you to evaluate some code and select the option that most correctly represents the value that a given variable is bound to. This section will also test your knowledge of vocabulary.

Assume that all code snippets in the following sections are written correctly and produce no syntax errors. Also assume that each snippet is independent of the others.

1. What is z bound to?

```
x = 'cat '  
y = 'dog '  
z = x + y
```

- A. 'catdog'
- B. 'dogcat'
- C. 'cat dog'
- D. 'cat','dog'

2. What is x bound to?

```
x = 'alien '  
y = 'aliens '  
x[1:]
```

- A. 'alien'
- B. 'lien'
- C. 'aliens'
- D. 'l'

3. What is x bound to?

```
aDict = { 'cat ' : 'paul ', 'dog ' : 'boscoe ', 'fish ' : 'jarvis ' }  
x = aDict.get( 'dog ', 'Franklin ' )
```

- A. 'jarvis'
- B. 'Franklin'
- C. 'boscoe'
- D. 'paul'

4. What is z bound to?

```
x = '1'  
y = '2'  
z = x + y
```

- A. 3
- B. 12
- C. '12'
- D. ERROR

5. Which of the following is mutable?

- A. String
- B. Tuple
- C. List
- D. Float

6. What does immutable mean?

- A. Can be printed
- B. Can be changed
- C. Can not be changed
- D. You can do math using it

7. What does print() return?

- A. None
- B. The string passed to it
- C. Whatever type you pass it
- D. It doesn't return

8. How do you get the last letter in a string of any given length?

- A. [0:]
- B. [3]
- C. [-1]
- D. [0]

9. What is x bound to?

```
x = 'alien '  
y = 'aliens '  
x = x[1:]
```

- A. 'alien'
- B. 'lien'
- C. 'aliens'
- D. 'l'

10. What is z bound to?

```
aList = ['this ', 'list ', 'is ', 'rather ', 'long ']  
aList.append(" isn't it")  
x = aList[2][0:]  
y = aList[5][6:]  
z = x + ' ' + y
```

- A. 'is it'
- B. 'long rather'
- C. 'is long'
- D. "list isn't"
- E. ERROR

11. What is x bound to?

```
aList = [ 'lists ', 'the ', 'are ', 'worst ' ]  
z = aList [2]  
aList [2] = aList [1]  
aList [1] = z  
aList [-1] = 'best '  
x = aList
```

- A. ['lists', 'the', 'are', 'worst']
- B. ['lists', 'are', 'the', 'best']
- C. ['lists', 'are', 'the', 'worst']
- D. ['best', 'are', 'the', 'lists']
- E. ERROR

12. What does input() return?

- A. None
- B. A String
- C. Whatever type you put in
- D. It doesn't return

13. What is the type of the thing z is bound to?

```
x = 2  
y = 17  
z = y // x
```

- A. Float
- B. Int
- C. Remainder
- D. String
- E. List

14. What is the type of the thing z is bound to?

```
x = 2
y = 17
z = y / x
```

- A. List
- B. String
- C. Remainder
- D. Int
- E. Float

15. What is x bound to?

```
x = 'CS is really fun!'
x.replace('fun!', 'hard...')
```

- A. 'CS is really hard...'
- B. 'CS is really fun!'
- C. 'hard...'
- D. 'fun!'

16. What is z bound to?

```
x = 'No, you should sleep more'
z = (x.replace('should', '').replace('sleep', '').replace('more', ''))
    .replace(' ', '')
```

- A. 'No,you'
- B. 'No, you'
- C. 'should sleep more'
- D. ERROR

17. Which of the following is immutable?

- A. List ['cat', 'dog', 'fish']
- B. Dictionary 'cat' : 'paul', 'dog' : 'boscoe'
- C. Tuple ('cat', 'dog', 'fish')
- D. All are mutable

18. What does the following function return when passed 'catdog'?

```
def func(word):  
    x = len(word) // 2  
    y = word[0:x]  
    z = word[x:]  
    return z + y
```

- A. 'cotdag'
- B. 'cogdat'
- C. 'cg'
- D. 'dogcat'

19. What does the following function return when passed 'firetruck'?

```
def func(word):  
    x = len(word) // 2  
    y = word[0:x]  
    z = word[x:]  
    return z + y
```

- A. 'truckfire'
- B. 'ruckfired'
- C. 'iretruckf'
- D. 'fire truck'

20. What does mutable mean?

- A. Can be printed
- B. Can be changed
- C. Can not be changed
- D. You can do math using it

21. What is x bound to?

```
def func(num):  
    num = int(num)  
    if num >= 75:  
        x = 'Wow! '  
    elif num >= 50:  
        x = 'Alright '  
    elif num == 32:  
        x = 'Hmmm? '  
    elif num >= 25:  
        x = 'Ok'  
    else:  
        x = '... '  
    return x  
  
x = 'Hello '  
func(31)
```

- A. 'Hello'
- B. 'Ok'
- C. '...'
- D. 'Hmmm?'

22. What is x bound to?

```
def func(num):  
    num = int(num)  
    if num >= 75:  
        x = 'Wow! '  
    elif num >= 50:  
        x = 'Alright '  
    elif num == 32:  
        x = 'Hmmm? '  
    elif num >= 25:  
        x = 'Ok'  
    else:  
        x = '... '  
    return x  
  
x = 'Hello '  
x = func(32)
```

- A. 'Hello'
- B. 'Ok'
- C. '...'
- D. 'Hmmm?'