

## Review Questions: Strings

1. What is printed by the following Python fragment?

```
s = "Jane Doe"  
print(s[1])
```

- (a) J
- (b) e
- (c) Jane
- (d) a

2. What is printed by the following Python fragment?

```
s = "Jane Doe"  
print(s[-1])
```

- (a) J
- (b) e
- (c) Jane
- (d) a

3. What is printed by the following Python fragment?

```
s = "Jane Doe"  
print(s[1:3])
```

- (a) Ja
- (b) Jan
- (c) an
- (d) ane

4. What is the output from the following program, if the input is Spam And Eggs?

```
def main():  
    msg = input("Enter a phrase: ")  
    for w in msg.split():  
        print(w[0], end="")  
main()
```

- (a) SAE
- (b) S A E
- (c) S S S
- (d) Spam And Eggs
- (e) None of the above.

5. What is the output of this program fragment?

```
for x in "Mississippi".split("i"):  
    print(x, end="")
```

- (a) Mssssp
- (b) M ssissippi
- (c) Mi ssi ssi ppi
- (d) M ss ss pp

6. ASCII is

- (a) a standardized encoding of written characters as numeric codes.
- (b) an encryption system for keeping information private.
- (c) a way of representing numbers using binary.
- (d) computer language used in natural language processing.

7. What function can be used to get the ASCII value of a given character?

- (a) str()
- (b) ord()
- (c) chr()
- (d) ascii()
- (e) None of the above.

8. What is output produced by the following?

```
s = "absense makes the brain shrink"  
x = s.find("s")  
y = s.find("s", x + 1)  
print(s[x : y])
```

- (a) sens
- (b) ens
- (c) en
- (d) sen

9. One difference between strings and lists in Python is that

- (a) strings are sequences, but lists aren't.
- (b) lists can be indexed and sliced, but strings can't.
- (c) lists are mutable (changeable), but strings immutable (unchangeable).
- (d) strings can be concatenated, but lists can't.

10. What is an appropriate for-loop for writing the characters of the string s, one character per line?

- (a) for ch in s:  
    print(ch)
- (b) for i in range(len(s)):  
    print(s[i])
- (c) Neither of the above.
- (d) Both of the above.

11. The following program fragment is meant to be used to find the sum of the ASCII values for all the characters in a string that the user enters. What is the missing line in this code?

```
phrase = input("Enter a phrase: ")  
ascii_sum = 0 # accumulator for the sum  
for ch in phrase:  
    ##### missing line here  
print(ascii_sum)
```

- (a) `ascii_sum = ascii_sum + ch`
- (b) `ascii_sum = chr(ch)`
- (c) `ascii_sum = ascii_sum + chr(ch)`
- (d) `ascii_sum = ascii_sum + ord(ch)`

12. What is the result of evaluating the expression `chr(ord('A') + 2)`?

- (a) 'A2'
- (b) 'C'
- (c) 67
- (d) An error.
- (e) None of the above.

13. What is the output of the following code?

```
s0 = "A Toyota"
s1 = ""
for ch in s0:
    s1 = ch + s1
print(s1)
```

- (a) A Toyota
- (b) atoyoT A
- (c) None of the above.

14. What is the output of the following code?

```
s0 = "A Toyota"
s1 = ""
for ch in s0[::-1]:
    s1 = ch + s1
print(s1)
```

- (a) A Toyota
- (b) atoyoT A
- (c) None of the above.

15. What is the output of the following code?

```
s0 = "A Toyota"
s1 = ""
for ch in s0[-1:0:-1]:
    s1 = s1 + ch
print(s1)
```

- (a) A Toyota
- (b) atoyoT A
- (c) None of the above.

16. What is the value of `z` after the following has been executed:

```
s = ""
for i in range(-1, 2):
    s = s + str(i)
z = int(s)
```

- (a) 0
- (b) 2
- (c) -1012
- (d) -101
- (e) This code produces an error.

17. What is the value of ch after the following has been executed?

```
ch = 'A'  
ch_ascii = ord(ch)  
ch = chr(ch_ascii + 2)
```

- (a) 'A'
- (b) 67
- (c) 'C'
- (d) This code produces an error.

18. What is the output produced by the print() statement in the following code?

```
s1 = "I'd rather a bottle in front of me than a frontal lobotomy."  
s2 = s1.split()  
print(s2[2])
```

- (a) '
- (b) d
- (c) rather
- (d) a
- (e) bottle

19. What is the output produced by the print() statement in the following code?

```
s1 = "I'd\nrather a bottle in front of me than a frontal lobotomy."  
s2 = s1.split()  
print(s2[2])
```

- (a) '
- (b) d
- (c) rather
- (d) a
- (e) bottle
- (f) None of the above.

20. The variable s contains the string 'cougars'. A programmer wants to change this variable so that it is assigned the string 'Cougars'. Which of the following will accomplish this?

- (a) **s.upper()**
- (b) **s[0] = 'C'**
- (c) **s = 'C' + s[1 : len(s)]**
- (d) **s.capitalize()**
- (e) All of the above.
- (f) None of the above.

21. What output is produced by the following code?

```
s = "Jane Doe"  
print(s[1 : 3: -1])
```

- (a) aJ
- (b) naJ
- (c) na
- (d) en
- (e) None of the above.

22. After the following commands have been executed, what is the value of x?

```
s = "this is a test"  
x = s.split()
```

23. After the following commands have been executed, what is the value of y?

```
s = "this is a test"  
y = s.split("s")
```

24. Recall that the str() function returns the string equivalent of its argument. What is the output produced by the following:

```
a = 123456  
s = str(a)  
print(s[5] + s[4] + s[3] + s[2])
```

25. What is the value of count after the following code has been executed?

```
s = "He said he saw Henry."  
count = s.count("he")
```

- (a) 0
- (b) 1
- (c) 2
- (d) 3
- (e) None of the above.

26. What is the value of s2 after the following has been executed?

```
s1 = "Grok!"  
s2 = s1[ : -2] + "w."
```

- (a) Grow.
- (b) kw.
- (c) k!w
- (d) None of the above.

27. What is the value of s2 after the following has been executed?

```
s1 = "Grok!"  
s2 = s1[-2] + "w."
```

- (a) Grow.
- (b) kw.
- (c) k!w
- (d) None of the above.

28. What is the value of s2 after the following has been executed?

**s1 = "Grok!"**

**s2 = s1[-2 : ] + "w."**

(a) kw.

(b) Grow.

(c) k!w

(d) None of the above.