9.9 Review Questions

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) `Mssssppp`

(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.