

1. What output is produced by the following code?

```
xlist = [1, [1, 2], [1, 2, 3]]  
print(xlist[1])
```

2. What output is produced by the following code?

```
xlist = [1, [1, 2], [1, 2, 3]]  
print(xlist[1][1])
```

3. What output is produced by the following code?

```
xlist = [1, [1, 2], [1, 2, 3]]  
print(xlist[1] + [1])
```

4. What output is produced by the following code?

```
def sum_part(xlist, n):  
    sum = 0  
    for x in xlist[n]:  
        sum = sum + x  
    return sum  
ylist = [[1, 2], [3, 4], [5, 6], [7, 8]]  
x = sum_part(ylist, 2)  
print(x)
```

5. Assume xlist is a list of lists where the inner lists have two elements. The second element of these inner lists is a numeric value. Which of the following will sum the values of the second element of the nested lists and store the result in sum?

- (a) 

```
sum = 0  
for item in xlist:  
    sum = sum + item[1]
```
- (b) 

```
sum = 0  
for one, two in xlist:  
    sum = sum + two
```
- (c) 

```
sum = 0  
for i in range(len(xlist)):  
    sum = sum + xlist[i][1]
```
- (d) All of the above.

6. What output is produced by the following code?

```
for i in range(3):  
    for j in range(3):  
        print(i * j, end="")
```

0,1,2

0 x 0, 1, 2  
1 x 0, 1, 2  
2 x 0, 1, 2

- (a) 123246369
- (b) 0000012302460369
- ☒ (c) 000012024
- (d) None of the above.

7. What output is produced by the following code?

```
s = "abc"
for i in range(1, len(s) + 1):
    sub = ""
    for j in range(i):
        sub = s[j] + sub
    print(sub)
```

Handwritten notes for question 7:

- $i = 1, 2, 3$
- $\text{range}(10)$
- $\text{range}(1)$
- $\text{range}(2)$
- $\text{range}(3)$
- $s[0]$
- $0$
- $a$
- $ba$
- $j =$
- $0, 1, 2$

- (a) a  
ba  
cba
- (b) a  
ab  
abc
- (c) a  
ab
- (d) This code produces an error.

8. What output is produced by the following code?

```
s = "grasshopper"
for i in range(1, len(s), 2):
    print(s[i], end="")
```

Handwritten notes for question 8:

- $1, 3, 5, 7, 9$

- (a) gasopr
- (b) gr
- (c) rshpe
- (d) rshper

9. What output is produced by the following code?

```
x = [7]
y = x
x[0] = x[0] + 3
y[0] = y[0] - 5
print(x, y)
```

Handwritten notes for question 9:

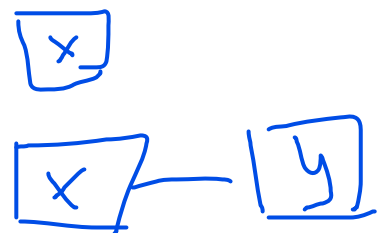
- $[5], [5]$

10. What output is produced by the following code?

```
x = [7]
y = x
x = [8]
print(x, y)
```

Handwritten notes for question 10:

- $[8], [7]$



11. What output is produced by the following code?

```
x = [1, 2, 3, 4]
y = x
y[2] = 0
z = x[1:]
x[1] = 9
print(x, y, z)
```

Handwritten notes for question 11:

- $1, 2, 0, 4$
- $9, 0, 4$
- $2, 3, 4$

12. What output is produced by the following code?

```
s = "row"
for i in range(len(s)):
    print(s[:i])
```

(a)

r  
ro

(b)

r  
ro  
row

(c)

ro  
row

(d) None of the above.

13. What output is produced by the following code?

```
s = "stab"
for i in range(len(s)):
    print(s[i:0:-1])
```

(a)

s  
ts  
ats  
bats

(b)

t  
at  
bat

(c)

s  
st  
sta

(d) None of the above.

14. What output is produced by the following code?

```
s = "stab"
for i in range(len(s)):
    print(s[i:-5:-1])
```

(a)

s  
ts  
ats  
bats

(b)

t  
at  
bat

(c)

s  
st  
sta

(d) None of the above.

15. What output is produced by the following code?

```
s = "stab"  
for i in range(len(s)):  
    print(s[0 : i : 1])
```

(a)

s

ts

ats

bats

(b)

t

at

bat

~~(c)~~

s

st

sta

(d) None of the above.