

1. What will be the output of the following code?

```
numbers = [3, 4, 6, 8, 10]
result = 0
for num in numbers:
    result += num % 3
print(result)
```

A. 2

B. 3

C. 4

D. 5

2. Consider the following code:

```
def change_values(lst):
    for i in range(len(lst)):
        lst[i] = lst[i] * 2
    return lst

my_list = [1, 2, 3, 4]
new_list = change_values(my_list)
print(my_list)
```

What will be printed?

A) [2, 4, 6, 8]

B) [1, 2, 3, 4]

C) [2, 2, 3, 4]

D) None

3. What is the output of the following code?

```
x = [1, 2, 3]
y = x
y.append(4)
print(x)
```

- A) [1, 2, 3]
- B) [1, 2, 3, 4]
- C) Error
- D) [4, 2, 3]

4. Consider the following code:

```
def find_even(numbers):  
    return [x for x in numbers if x % 2 == 0]  
  
numbers = [1, 2, 3, 4, 5]  
evens = find_even(numbers)  
print(evens)
```

What is the output?

- A) [2, 4]
- B) [1, 3, 5]
- C) []
- D) [1, 2, 3, 4, 5]

5. What will the output of the following code be?

- A) Less than 5
- B) Greater than 5
- C) Equal to 5

```
def check_value(x):  
    if x < 5:  
        return "Less than 5"  
    elif x == 5:  
        return "Equal to 5"  
    else:  
        return "Greater than 5"  
  
result = check_value(5)  
print(result)
```

D) Error

6. What is the output of the following code?\

```
def mystery_function(num):  
    if num < 0:  
        return -num  
    else:  
        return num  
  
print(mystery_function(-10))
```

A) -10

B) 10

C) None

D) Error

7. What does the following code do?

```
numbers = [1, 2, 3, 4, 5]  
print(len(numbers))
```

A) Prints the largest number in the list

B) Prints the last number in the list

C) Prints the number of items in the list

D) Prints the sum of the numbers in the list

8. What will this code print?

```
colors = ["red", "green", "blue"]
colors[0] = "yellow"
print(colors)
```

- A) ["yellow", "green", "blue"]
- B) ["red", "green", "blue", "yellow"]
- C) ["yellow", "green"]
- D) ["red", "yellow", "blue"]

9. What will the following code output?

```
for i in range(1, 6):
    if i % 2 == 0:
        print(i)
```

- A) 1 2 3 4 5
- B) 2 4
- C) 0 2 4
- D) 1 3 5

10. What will the following code output?

```
name = "Emily"
if len(name) > 4:
    print("Name is long")
else:
    print("Name is short")
```

- A) Name is long
- B) Name is short
- C) Error
- D) Nothing