

20 Python Questions for Beginners

1. Variables and Basic Operations

Question: What will this code output?

```
python  
  
x = 10  
y = 3  
print(x + y)  
print(x - y)  
print(x * y)  
print(x / y)
```

Answer: 13, 7, 30, 3.3333333333333335

2. String Methods

Question: What will be printed?

```
python  
  
text = "Hello World"  
print(text.lower())  
print(text.upper())  
print(text.replace("World", "Python"))
```

Answer: hello world, HELLO WORLD, Hello Python

3. List Indexing

Question: What will this code print?

```
python  
  
numbers = [1, 2, 3, 4, 5]  
print(numbers[0])  
print(numbers[-1])  
print(numbers[1:4])
```

Answer: 1, 5, [2, 3, 4]

4. Boolean Logic

Question: What will each print statement output?

```
python  
  
a = True  
b = False  
print(a and b)  
print(a or b)  
print(not a)
```

Answer: False, True, False

5. For Loop Basics

Question: What will this loop print?

```
python  
  
for i in range(3):  
    print(i * 2)
```

Answer: 0, 2, 4 (each on a new line)

6. Dictionary Access

Question: What will be printed?

```
python  
  
person = {"name": "John", "age": 30, "city": "New York"}  
print(person["name"])  
print(person.get("age"))  
print(person.get("height", "Unknown"))
```

Answer: John, 30, Unknown

7. String Formatting

Question: What will this f-string produce?

```
python  
  
name = "Alice"  
score = 95  
print(f'{name} scored {score}% on the test')
```

Answer: Alice scored 95% on the test

8. List Comprehension

Question: What will this list comprehension create?

```
python

squares = [x**2 for x in range(5)]
print(squares)
```

Answer: [0, 1, 4, 9, 16]

9. Conditional Statements

Question: What will be printed for different values of age?

```
python

age = 17
if age >= 18:
    print("Adult")
elif age >= 13:
    print("Teenager")
else:
    print("Child")
```

Answer: Teenager (for age = 17)

10. Function Definition

Question: What will this function return when called?

```
python

def greet(name="World"):
    return f"Hello, {name}!"

print(greet())
print(greet("Python"))
```

Answer: Hello, World!, Hello, Python!

11. While Loop

Question: What will this while loop print?

```
python
count = 0
while count < 3:
    print(count)
    count += 1
```

Answer: 0, 1, 2 (each on a new line)

12. Tuple Operations

Question: What will happen with this tuple code?

```
python
coordinates = (10, 20)
x, y = coordinates
print(x)
print(y)
```

Answer: 10, 20

13. String Splitting

Question: What will this produce?

```
python
sentence = "apple,banana,orange"
fruits = sentence.split(",")
print(fruits)
print(len(fruits))
```

Answer: ['apple', 'banana', 'orange'], 3

14. List Methods

Question: What will the list look like after these operations?

```
python
```

```
numbers = [1, 2, 3]
numbers.extend([4, 5])
numbers.pop()
print(numbers)
```

Answer: [1, 2, 3, 4]

15. Type Conversion

Question: What will be printed?

```
python

num_str = "42"
num_int = int(num_str)
print(type(num_str))
print(type(num_int))
print(num_int + 8)
```

Answer: <class 'str'>, <class 'int'>, 50

16. Set Operations

Question: What will this set code produce?

```
python

colors = {"red", "blue", "green", "red"}
print(colors)
print(len(colors))
```

Answer: {'red', 'blue', 'green'} (order may vary), 3

17. Exception Handling

Question: What will be printed?

```
python

try:
    result = 10 / 0
    print(result)
except ZeroDivisionError:
    print("Cannot divide by zero!")
```

Answer: Cannot divide by zero!

18. Range Function

Question: What will this create?

```
python

numbers = list(range(2, 10, 2))
print(numbers)
```

Answer: [2, 4, 6, 8]

19. String Checking Methods

Question: What will each method return?

```
python

text = "Hello123"
print(text.isalpha())
print(text.isdigit())
print(text.isalnum())
```

Answer: False, False, True

20. Lambda Function

Question: What will this lambda function produce?

```
python

multiply = lambda x, y: x * y
result = multiply(5, 3)
print(result)

numbers = [1, 2, 3, 4, 5]
squared = list(map(lambda x: x**2, numbers))
print(squared)
```

Answer: 15, [1, 4, 9, 16, 25]

Practice Tips:

- Try running each code snippet in your Python environment

- Modify the values and see how the output changes
- Practice explaining why each output occurs
- These concepts form the foundation for more advanced Python programming