

PROG Python Quizz

These are all multiple choice questions with only one correct answer.

Values, Expressions, Variables

Q1. What does the following code print?

```
print(3)
```

- ☐ It does not print anything.
- ☐ Three
- ☐ 3
- ☐ 0

Q2. What does the following code print?

```
print(3 + 2)
```

- ☐ It does not print anything.
- ☐ 5
- ☐ 32
- ☐ 3 + 2

Q3. What does the following code print?

```
print("3 + 2")
```

- ☐ It does not print anything.
- ☐ None
- ☐ 3 + 2
- ☐ 5

Purpose of below questions: Check whether the student understands: What is a variable, what does it evaluate to in an expression?

Q4. What does the following code print?

```
print(x)
```

- ☐ It does not print anything. An error occurs.
- ☐ x

Q5. What does the following code print?

```
x = 5  
print(x)
```

- ☐ It does not print anything. An error occurs.
- ☐ 5
- ☐ x

Q6. What does the following code print?

```
x = 5
print(x - 3)
```

- ☐ It does not print anything. An error occurs.
- ☐ x - 3
- ☐ 2
- ☐ 5 - 3

Purpose of below questions: Check whether the student understands: Assignment, how reassignment works, the order of execution of instructions

Q7. What does the following code print?

```
x = 0
x = 1
print(x)
```

- ☐ It does not print anything. An error occurs.
- ☐ x
- ☐ 0
- ☐ 1

Q8. What does the following code print?

```
x = 0
print(x)
x = 1
print(x)
```

- ☐ It does not print anything. An error occurs.
- ☐ x x
- ☐ 0 0
- ☐ 0 1
- ☐ 1 1
- ☐ 1 0
- ☐ It depends. Two executions can lead to different outcomes.

Q9. What does the following code print?

```
x = 5
y = 7
x = y
print(x, y)
```

- ☐ It does not print anything. An error occurs.
- ☐ 5 7
- ☐ 7 5
- ☐ 7 7
- ☐ 5 5
- ☐ x y

Q10. What does the following code print?

```
x = 2
x = x - 1
print(x)
```

- ☐ It does not print anything. An error occurs.
- ☐ 2
- ☐ x
- ☐ 1
- ☐ -1

Control Flow: Conditionals

Purpose of below questions: Check whether the student understands: Boolean values, difference between equality boolean operator and assignment

Q11. What does the following code print?

```
print(1 == 2)
```

- ☐ It does not print anything. An error occurs.
- ☐ 1 == 2
- ☐ False
- ☐ 2

Q12. What does the following code print?

```
x = 3 == 3
print(x)
```

- ☐ It does not print anything. An error occurs.
- ☐ 3
- ☐ True
- ☐ x

Purpose of below questions: Check whether the student understands: the if statement, the else statement

Q13. What does the following code print?

```
if 0 == 1:
    print("a")
print("b")
```

- ☐ It does not print anything. An error occurs.
- ☐ It does not print anything. But no error.
- ☐ a b
- ☐ a
- ☐ b

Q14. What does the following code print?

```
if 0 == 1:
```

```
    print("a")
else:
    print("b")
```

- ☐ It does not print anything. An error occurs.
- ☐ It does not print anything. But no error.
- ☐ a b
- ☐ a
- ☐ b

Purpose of below questions: Check whether the student understands: code blocks

Q15. What does the following code print?

```
if 0 == 1:
    print("a")
    print("b")
```

- ☐ It does not print anything. An error occurs.
- ☐ It does not print anything. But no error.
- ☐ a b
- ☐ a
- ☐ b

Q16. What does the following code print?

```
if 0 == 1:
    print("a")
    print("b")
else:
    print("c")
    print("d")
print("e")
```

- ☐ It does not print anything. An error occurs.
- ☐ a
- ☐ c
- ☐ e
- ☐ a b
- ☐ a b e
- ☐ c d
- ☐ c d e

Q17. What does the following code print?

```
if 0 == 1:
    print("a")
    print("b")
print("e")
else:
    print("c")
```

```
print("d")
```

- ☐ It does not print anything. An error occurs.
- ☐ a
- ☐ c
- ☐ e
- ☐ a b
- ☐ a b e
- ☐ c d
- ☐ e c d

Purpose of below questions: Check whether the student understands: nested ifs

Q18. What does the following code print?

```
if 0 == 1:
    print("a")
else:
    if 1 == 1:
        print("b")
    else:
        print("c")
    print("d")
```

- ☐ It does not print anything. An error occurs.
- ☐ It does not print anything. But no error.
- ☐ a
- ☐ b
- ☐ c
- ☐ d
- ☐ b d
- ☐ c d
- ☐ b c d

Control Flow: Loops

Purpose of below questions: Check whether the student understands: while statement

Q19. How many lines does the following code print?

```
n = 0
while n > 1:
    print("ok")
```

- ☐ 0
- ☐ 1
- ☐ Theoretically, infinitely many

Q20. How many lines does the following code print?

```
n = 3
while n > 1:
    print("ok")
```

- ☐ 0
- ☐ 1
- ☐ Theoretically, an infinite amount of times

Q21. How many lines does the following code print?

```
n = 3
while n > 1:
    n = n - 1
    print("ok")
```

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ Theoretically, infinitely many

Q22. What does the following code print?

```
x = 1
y = -1
while x < 5:
    y = y - 1
    x = x * 2
print(x, y)
```

- ☐ x, y
- ☐ 4 -4
- ☐ 4 -3
- ☐ 5 -5
- ☐ 5 -4
- ☐ 8 -4
- ☐ 8 -8

Q23. What does the following code print?

```
n = 0
while n < 3:
    if n < 2:
        print("less")
    else:
        print("more")
    n = n + 1
```

- ☐ It does not print anything.
- ☐ less
- ☐ more
- ☐ less more

- ☐ less less more
- ☐ less more more
- ☐ less less more more

Purpose of below questions: Check whether the student understands: for-in statement and nested loops

Q24. What does the following code print?

```
for x in [3, 1]:
    for y in [2, 4]:
        print(x, y)
```

- ☐ 1 2 3 4
- ☐ 3 2 1 4
- ☐ 3 2 1 2 3 4 1 4
- ☐ 3 2 3 4 1 2 1 4

Functions

Purpose of below questions: Check whether the student understands: The notions and distinctions between function definition, function call, function parameters, body of the function. Which instructions are executed and in what order when defining and calling one function.

Q25. What does the following code print?

```
def print_one():
    print(1)
```

- ☐ It does not print anything.
- ☐ 1

Q26. What does the following code print?

```
def print_one():
    print(1)
print_one()
```

- ☐ It does not print anything.
- ☐ 1
- ☐ 1 1

Q27. What does the following code print?

```
def print_one():
    print(1)
print(2)
print_one()
```

- ☐ It does not print anything.
- ☐ 1 2

- ☐ 2 1
- ☐ 1 2 1

Consider the following code:

```
def print_sum(x, y):  
    print(x + y)
```

Q28. What is the name of the above-defined function?

- ☐ def print_sum(x, y)
- ☐ print_sum(x, y)
- ☐ print_sum

Q29. What are the parameters (or arguments) of the above-defined function?

- ☐ x, y
- ☐ x + y
- ☐ There are none

Q30. Which line(s) correspond(s) to the body of the above-defined function?

- ☐ The first line
- ☐ The second line
- ☐ The first and the second lines
- ☐ There is no function body

Q31. Which line(s) contain(s) a function call in the above code?

- ☐ The first line
- ☐ The second line
- ☐ The first and the second lines
- ☐ There are no function calls

Purpose of below questions: Check whether the student understands: how to pass values to a function

Q32. What does the following code print?

```
def print_sum(x, y):  
    print(x + y)
```

```
x = 1  
y = 2  
print_sum(3, 4)
```

- ☐ It does not print anything. No error.
- ☐ It does not print anything. An error occurs.
- ☐ 3
- ☐ 7
- ☐ 3 7

Purpose of below questions: Check whether the student understands: the return value

Q33. What does the following code print?

```
def sum(x, y):  
    print(x)  
    return x + y
```

```
a = 1  
b = sum(a, -1)  
print(b)
```

- ☐ It does not print anything. An error occurs.
- ☐ 1
- ☐ 0
- ☐ 1 0

Purpose of below questions: Check whether the student understands: Which instructions are executed and in what order when using several functions, possibly calling each other.

Q34. What does the following code print?

```
def fun_a(x):  
    print(x - 1)  
    return x + 1
```

```
def fun_b(y):  
    print(y)  
    z = fun_a(x)  
    print(z)  
    return z * 2
```

```
y = 1  
z = fun_b(y)  
print(z)
```

- ☐ It does not print anything. An error occurs.
- ☐ 0 1 2 4
- ☐ 1 0 2 4
- ☐ 4 1 0 2
- ☐ 4 1 0 2