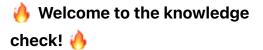
QUIZ 1 OF 6

Chapter 2 Knowledge Check

Software Engineering > Chapter ...



In this (somewhat) lengthy quiz you will get an idea of how you're doing up until now.

Please note that the required score to pass the test is 100%, meaning you need to get all the questions right to pass! Take any mistakes you might make not as a sign of weakness, but rather an indicator of what you need to revisit.

Remember, you cannot succeed if you do not fail spectacularly and learn from it!

Good luck 🌼

Results

39 of 45 Questions answered

correctly

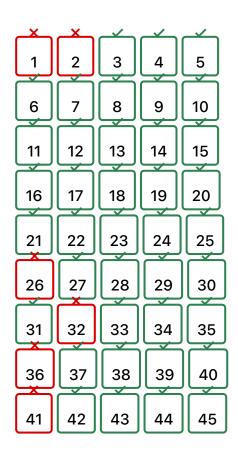
YOUR TIME: 00:20:34

You have reached 39 of 45 point(s), (86.67%)

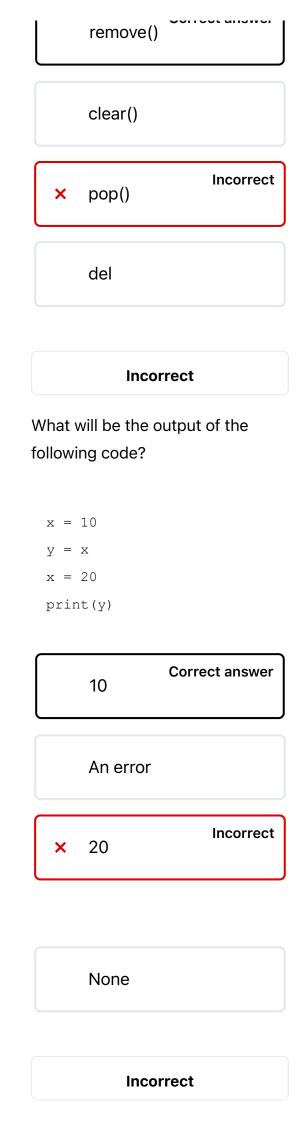
Restart Quiz

View Questions

Continue



Which method removes an element by its value?



What is the main purpose of programming?

To create hardware components

To memorize computer commands

To manually execute repetitive calculations

Correct

To write and execute

✓ structions for computers
to perform tasks

ⅎ	CO D/ NG	WBS CODING
		SCHOOL

- (?) Chapter 2 Knowledge Check
- ? Code Knowledge Check

<u>Arrays</u>

Correct



What is a function in Python?

A library

A variable

 \sim

0

A piece of reusable code

Chapter 3: Linear Data Structures

- ► Intro to Data Structures and Alg... 2 Topics
- Stacks 1 Topic
- ▶ Queues 1 Topic
 - Exercises 5 Topics A data structure

10 Topics

•	<u>Chapter 3 Exam</u>	<u>1 Quiz</u>			
CI	aantar 4. Nan linaar Data Stru	oturoo		Correct	
Ci	napter 4: Non-linear Data Stru	ctures		Which approximate the check if	
•	<u>Hash Tables</u>	3 Topics		Which operator is used to check if two values are NOT equal?	
•	<u>Trees</u>	7 Topics	\bigcirc	==	
•	<u>Graphs</u>	7 Topics	\bigcirc		
•	Evarcicae	6 Tonics	\bigcap	✓ !=	
				>=	
				<	M.
				Correct	
				What is the main purpose of pseudocode?	
				To write actual executable code	
				Correct To describe an ✓ jorithm in a human- readable format	
				To replace programming languages	

To debug programs before running them

Correct

What is an infinite loop?

A loop that breaks automatically

A loop inside a function

A loop with a condition unat always remains True

A loop that executes only once

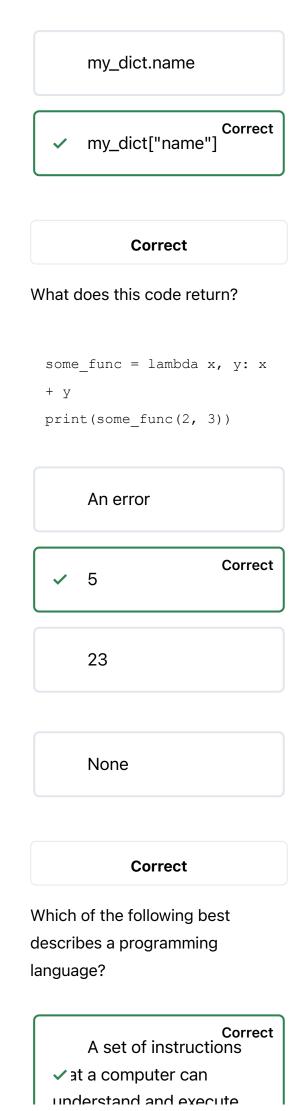
Correct

How do you access the value associated with a key in a dictionary?

```
my_dict = {"name":
"Bobby"}
```

my_dict[0]

my_dict("name")



anacistana ana caccate

A tool for writing mathematical equations

A method for designing databases

A way to communicate with other programmers

Correct

What happens if a function expects two arguments but only one is provided?

Correct

It raises a TypeError

It runs with a default value

It ignores the missing argument

It returns None

Correct

What is the correct data type for

bool

str

Correct

What does

5

my list.append(5) do?

Creates a new list with

Removes 5 from the list

Adds 5 to the end of une list

Inserts 5 at index 0

Correct

What is a control structure in Python?

A way to organize functions

A library for managing loops

Correct

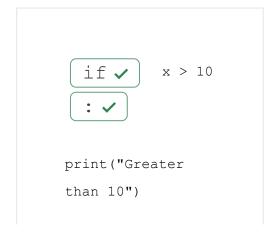
A structure that

I ntrols the flow of a program

A method for defining variables

Correct

What is the correct way to write an if statement in Python?



Correct

What is the key difference between a list and a tuple?

Correct

Tuples are immutable, ists are mutable

Tuples are faster than lists but less flexible

Lists are immutable, tuples are mutable

Lists use parentheses (), tuples use []

Correct

Which of the following is a valid Python variable name?

my var

my_var_2

Correct

mv-var

...,

2my_var

Correct

When does a while loop stop executing?

When return is used

When an error occurs

When the loop reaches the break

After a fixed number of iterations

Correct

What is pattern matching in Python?

A method to compare strings

A way to format text

A way to iterate over lists

Correct

A feature that allows
matching different
structures using matchcase

Correct

Which data type would best represent a value of 6.4?

int

float

Correct

str

bool

Correct

Which method adds an element to a set?

update()

append()

insert()

✓ add()

Correct

Correct

Which of the following is NOT a benefit of list comprehension?

It can replace for loops in some cases

It always runs faster

unan regular loops

It simplifies loops

It makes code more readable

Correct

How do you create a list in Python?

$$my_list = \{1, 2, 3\}$$

 $mv list = (1 \ 2 \ 3)$

✓ my_list = [1, 2, 3]

Correct

How do you create a tuple with a single element?

[1]



{1}

(1)

Correct

What is a key difference between a list and a set in Python?

Lists allow duplicate values, but sets do not

Lists use curly braces {}, while sets use []

Lists are unordered, sets are ordered

Lists only contain numbers, sets contain any data type

Correct

What does this code return?

[x*2 for x in range(3)]

× [2, 4, 6]

Incorrect

[0, 2, 4] Correct answer

[1, 2, 3]

[0, 1, 2]

Incorrect

What does the expression 5 == "5" return in Python?

None

True
✓ False Correct
An error
Correct
What is i in this loop?
<pre>for i in range(5): print(i)</pre>
✓ The loop counter
A list element
A function
A dictionary key
Correct
What happens if no exception occurs in the try block?

The program stops

The except block runs

Correct The except block is sкipped

The program crashes

Correct

Given $my_list = [10, 20,$ 30, 40] , what does my_list[2] return?

20

10

Correct 30

40

Correct

Which of the following is true about pseudocode?

It is only used in advanced programming

It follows the syntax of Python exactly

It can be executed directly by a computer

Correct

It helps programmers outline logic before coding

Correct

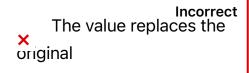
What happens if you add a duplicate value to a set?

Correct answer The duplicate is

ignored

An error occurs

The set will store duplicates



Incorrect

What happens if you try to access an index that does not exist in a list?

✓ It raises an IndexError

It returns None

It deletes the list

It prints Undefined

Correct

What is a lambda function?

A function defined without a name

A function that runs automatically

A function with a

return statement A built-in Python function Correct Which of the following data structures is mutable? String Integer Tuple Correct Set Correct What data structure is a dictionary based on? Incorrect × Sets Tuples

Lists

Correct answer Hash tables

Incorrect

What is a variable in Python?

A constant value that never changes

A part of Python's standard library

Correct

A named storage

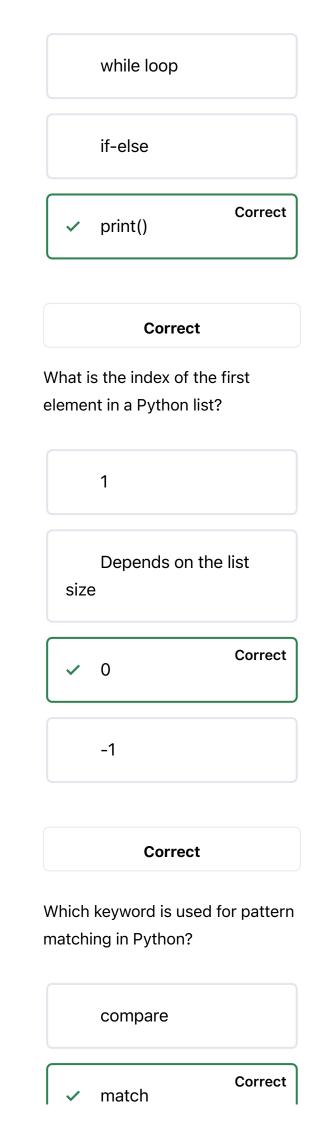
vation for a value in memory

A type of function that prints values

Correct

Which of the following is NOT a control structure?

for loop



switch

Correct

What is a parameter in a function?

The name of a function

The value returned by x a runction

Correct answer A value passed into a function

The function's print statement

Incorrect

What is the purpose of a try-except block in Python?

To catch and handle errors

To define a function

To declare variables To import libraries Correct How many times does this loop run? for i in range(3): print(i) 2 Correct 3 Infinite loop 1 Correct What is the output of this code?

```
x = 5
if x > 3:
    print("Hello")
```