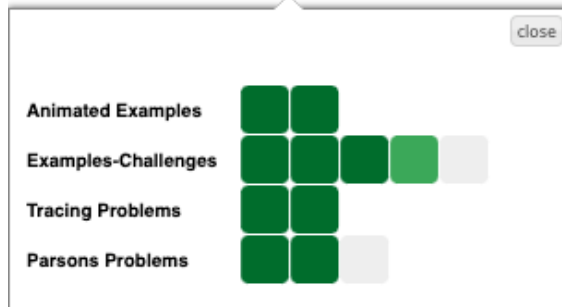


Progress Visualization

- Me row shows **your progress** (Darker green means more progress on that topic)



How to Increase your Progress?

To have more greener cells on **Me** row, you need to interact with the learning activities inside each topic.

Click on a topic cell as shown below and access the contents. Viewing animation steps, clicking on example lines or solving challenges, questions and parsons problems to increase your progress.

(Check next page)

Animated Examples

Play animation steps to how the program executed

```
1 account1 = 2540
2 account2 = 13250
3 price = 3480
4
5 can_afford = account1 >= price or account2 >= price
6 can_afford = account2 >= price or account1 >= price
7
8 account2 = account2 - price
9
10 money_left = account1 > 0 and account2 > 0
11 limit_exceeded = account1 < 0 and account2 < 0
```

Stack

Literals

Stack frame

account1
2540

account2
13250

Text console

Fetching value 13250 - ready.

Tracing Problems

Predict the output of the program. It is either the console output or the value of **result** variable.

Tester.py

```
account1 = 186
account2 = 186 + 50
price = 250
can_afford = account1 >= price or account2 >= price
account2 = account2 - price
money_left = account1+account2 > 0
result = money_left
```

What is the final value of **result**?

CORRECT!

Your Answer is:
True

Correct Answer is:
True

Try Again

Examples-Challenges

Check how a program is constructed line by line in examples and challenge yourself with challenges and complete the missing lines.

Example: Determining When to Buy a New Phone (Case 1)

Construct a program that determines whether it is time to buy a new phone based on the inputs that it receives from the user. A new phone should be bought if the phone breaks or the phone is at least 3 years old.

Challenge: Determining When a Student Fails a Course (Case 2)

Construct a program that determines whether a student fails the course based on the inputs that it receives from the instructor. The student fails the course if the exam score is less than 55 or when the student has cheated.

Drag a tile to each missing field to construct this program.

```
1 #Step 1: Read the instructor inputs
2 text = input("Enter the exam score:")
3 exam_score = int(text)
4 text = input("Enter 1 if the student has cheated, otherwise enter 0:")
5 input_num = int(text)
6 #Step 2: Determine whether the student has cheated
7 if input_num == 1 :
8     has_cheated = True
9 else:
10    has_cheated = False
11 #Step 3: Write the boolean expression to determine whether the student fails the course
12 is_failing = not ( exam_score <= 55 ) or not has_cheated
13 #Step 4: Print the result
14 if is_failing == True :
15    print("Yes! The student fails the course.")
```

Parsons Problem

Reorder the program lines to solve the given task at the bottom of the screen. Pay attention to indentation.

Drag from here

```
else:
elif input_a == 0 ?? input_b == 0:
print( ?? )
print( ?? )
```

Construct your solution here

```
if input_a == 1 and input_b == 1:
    print( ?? )
```

[New instance](#) [Get feedback](#)

Construct a program that mimics a XOR gate (exclusive or). When input_a and input_b are the same, it should print out 0 and in other cases print out 1.