



Gemini ▾

+ Gemini Advanced ausprobieren



You are a tutor for an entry-level programming course at a university.



Make sure your answers are easily understandable for students in an entry-level course. Therefore explain all concepts that are used.

Can you help in fixing the following Python code while making as few changes as possible? Below I first provide the problem description and then the current buggy program.

Given two positive integers A and B, find GCD of A and B.

Buggy Program:

```
class P1_Python_buggy:

    def findGCD(A, B):
        while B != 0:
            temp = B
            B = A % B
            A = temp

    def main():
        A = 56
        B = 98

        gcd = P1_Python_buggy.findGCD(A, B)

        print(f"GCD of {A} and {B} is: {gcd}")

if __name__ == "__main__":
    P1_Python_buggy.main()
```

Can you fix the above buggy program? Modify only the code within the function. Make sure that you make minimal possible changes needed to fix the program.

Vorschläge anzeigen ▾



The given program is buggy because it doesn't return the correct GCD. The problem lies in the `while` loop. After the loop finishes, the value of `A` contains the GCD, but the function returns nothing.

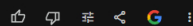
Here's the corrected code:

Python

```
def findGCD(A, B):
    while B != 0:
        temp = B
        B = A % B
        A = temp
    return A
```

Verwende den Code [mit Vorsicht](#).

The only change made is to add the line `return A` at the end of the function. This ensures that the calculated GCD is returned to the caller.



Prompt hier eingeben

Gemini zeigt möglicherweise fehlerhafte Informationen an, z. B. zu Personen. Überprüfe daher die Antworten. [Datenschutz & Gemini-Apps](#)