

o



```
def fibonacci_index(number):
  if number < 0:</pre>
     raise ValueError("Keine gültige Fibonacci-Zahl")
  index = 1
   f_2 = 0
   while fib <= number:
```

```
if fib = number:
return index
fib = f1 + f2
f2 = f1
index += 1
```

raise ValueError("Keine gültige Fibonacci-Zahl")

```
number = int(input("Bitte geben Sie eine Zahl ein!"))
     print(f"Die Zahl ist Zahl {P2_Python_buggy.fibonacci_index(number)} der
Fibonacci-Folge.")
    except ValueError as e:
     print(e)
```

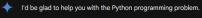
```
if __name__ == "__main__":
P2_Python_buggy.main()
```

def main():

(1) Can you describe the bug(s) in this program and the required fixes?
(2) Can you provide a concise single-sentence hint about one bug in this program?

The hint should not be too detailed as I want to think about the fixes by myself. abstract, as I need some help.

Vorschläge anzeigen 🗸 🌖



Bug Analysis and Fixes:

- 1. Incorrect Assignment: The line if fib = number: is using an assignment operator (=). It should be a comparison operator (==) to check if fib is equal
- 2. Missing Base Case: The code doesn't handle the cases where number is 0 or 1, which are the first two Fibonacci numbers.
- 3. Incorrect Return Value: If $\ensuremath{\,^{\text{number}}}$ is not a Fibonacci number, the code should return -1 or a similar indicator, rather than raising a ValueError

The $\ensuremath{\mbox{if}}$ statement in the $\ensuremath{\mbox{while}}$ loop is using an incorrect operator.

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