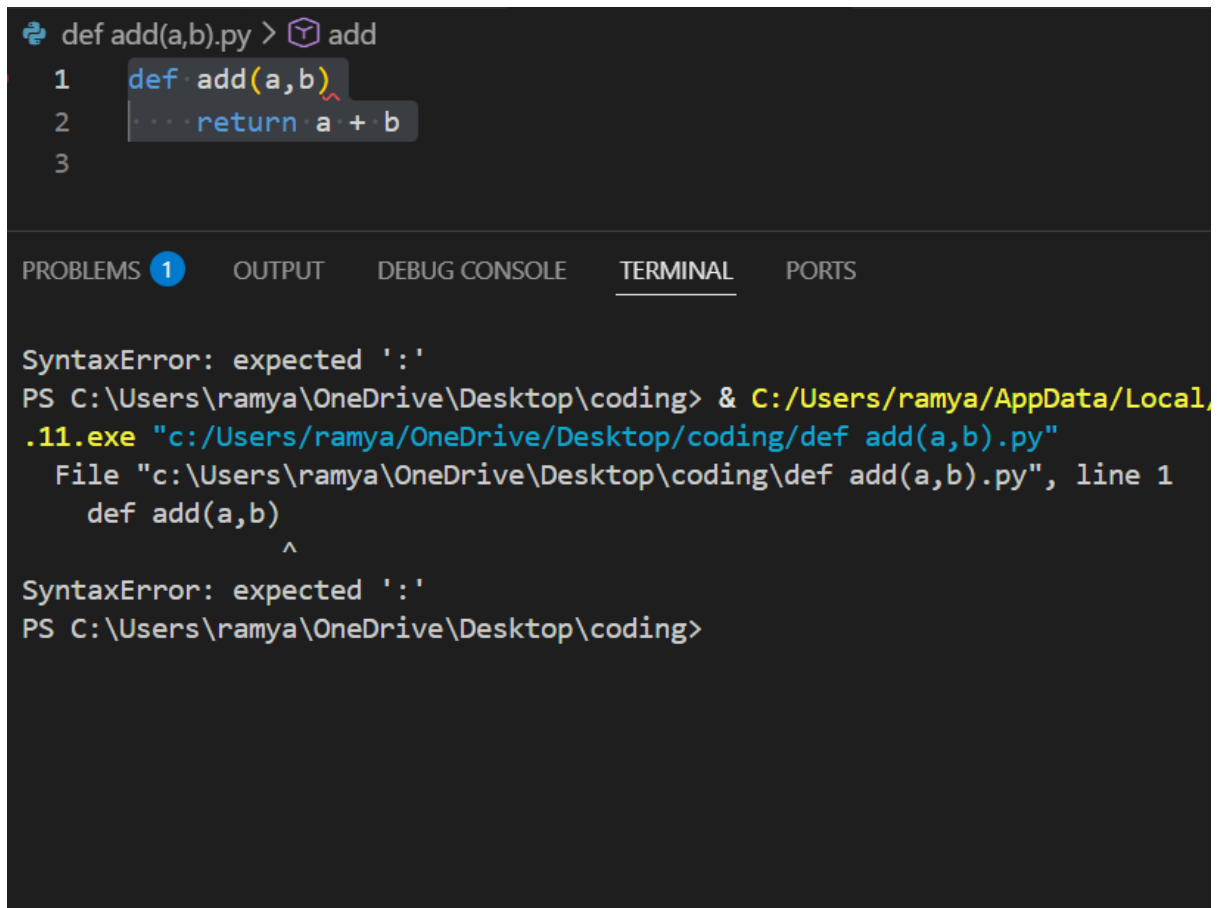


Name:T.Ramyasri

Hall.no:2303A52136

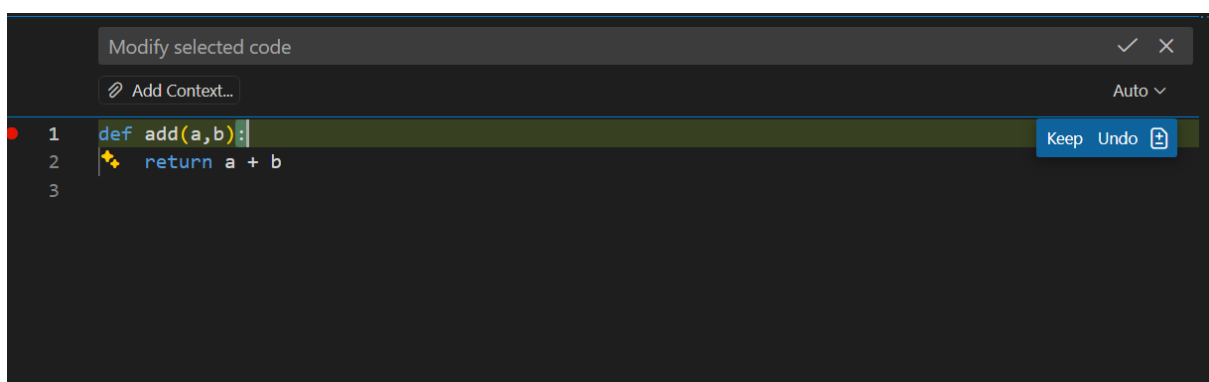
TASK-1:



```
def add(a,b).py > add
1 def add(a,b)
2     return a + b
3

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

SyntaxError: expected ':'
PS C:\Users\ramya\OneDrive\Desktop\coding> & C:/Users/ramya/AppData/Local/
.11.exe "c:/Users/ramya/OneDrive/Desktop/coding/def add(a,b).py"
File "c:\Users\ramya\OneDrive\Desktop\coding\def add(a,b).py", line 1
def add(a,b)
    ^
SyntaxError: expected ':'
PS C:\Users\ramya\OneDrive\Desktop\coding>
```



```
Modify selected code ✓ ✕
Add Context... Auto v
1 def add(a,b):
2     return a + b
3

Keep Undo
```

Workspace

> Used 1 reference

The error occurs because your function definition is missing a colon (:) at the end of the `def` line. In Python, you must add a colon after the function signature.

Here's the corrected code:

```
def add(a, b):  
    return a + b
```

**Tip:**  
Always end function definitions with a colon. This tells Python that the following indented lines belong to the function body.

🔄 ↶ 📄 📋

GPT-4.1 • 1x

## TASK-2:

```
def add(a,b).py > count_down  
1 def count_down(n):  
2     while n>=0:  
3         print(n)  
4         n+=1
```

Corrected code:

```
def add(a,b).py > count_down
def count_down(n):
    while n>=0:
        print(n)
        n+=1
        -
```

Justification:

- Condition: `while n >= 0` → always true once `n` starts positive.
- Update: `n += 1` → makes `n` bigger, never less than 0.
- Result: infinite loop, output keeps going up: `5, 6, 7, 8...`.

TASK-3:

```
1 def divide(a,b):
2     return a/b
3
4 print(divide(10,0))
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ramya\OneDrive\Desktop\coding> & C:/Users/ramya/AppData/Local/Programs/Python/Python311/Python311.exe "c:/Users/ramya/OneDrive/Desktop/coding/def_divide.py"
le>
print(divide(10,0))
^^^^^^^^^^^^^^^^
File "c:\Users\ramya\OneDrive\Desktop\coding\def_divide.py", line 2, in divide
    return a/b
           ^^
ZeroDivisionError: division by zero
PS C:\Users\ramya\OneDrive\Desktop\coding> 
```

Corrected code:

```
def add(a,b).py > ...
1  def divide(a, b):
2      """
3      Safely divide a by b.
4      Returns the quotient when b != 0, otherwise returns None.
5      """
6      try:
7          return a / b
8      except ZeroDivisionError:
9          # Handle division by zero gracefully
10         print("Error: division by zero")
11         return None
12
13 # Demo runs
14 if __name__ == "__main__":
15     print("divide(10, 2) ->", divide(10, 2))
16     print("divide(10, 0) ->", divide(10, 0))

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\ramya\OneDrive\Desktop\coding> & C:/Users/ramya/AppData/Local/Micro
ft/WindowsApps/python3.11.exe "c:/Users/ramya/OneDrive/Desktop/coding/def add(a
).py"
File "c:\Users\ramya\OneDrive\Desktop\coding\def add(a,b).py", line 7
    return new_func()
    ~~~~~
SyntaxError: 'return' outside function
PS C:\Users\ramya\OneDrive\Desktop\coding> & C:/Users/ramya/AppData/Local/Micro
ft/WindowsApps/python3.11.exe "c:/Users/ramya/OneDrive/Desktop/coding/def add(a
).py"
divide(10, 2) -> 5.0
Error: division by zero
divide(10, 0) -> None
PS C:\Users\ramya\OneDrive\Desktop\coding> 
```

Justification:

: The function tries to divide by zero, which is not allowed, so Python throws an error instead of producing output.

## TASK-4:

```
def add(a,b).py > ...
1  class Rectangle:
2      def __init__(length,width):
3          self.length=length = length
4          self.width = width
5
PROBLEMS 7 OUTPUT DEBUG CONSOLE TERMINAL PORTS
File "c:\Users\ramya\OneDrive\Desktop\coding\def add(a,b)
C:\Users\ramya\OneDrive\Desktop\coding> & C:/Users/ramya
c/windowsApps/python3.11.exe "c:/Users/ramya/OneDrive/Desk
py"
File "c:\Users\ramya\OneDrive\Desktop\coding\def add(a,b)
    def__init__(length,width):
                                ^
SyntaxError: invalid syntax
C:\Users\ramya\OneDrive\Desktop\coding> 
```


Corrected code:

```
class Rectangle:
    def __init__(self, length, width):
        self.length = length
        self.width = width
```

## Justification:

`@workspace` `/explain` "self" is not defined, "self" is not defined

`def add(a,b).py:1-5`

 **Workspace**





> Used 1 reference

✓ Crafting a clear explanation

You're missing the instance parameter; add `self` as the first parameter.

```
# ...existing code...
class Rectangle:
    def __init__(self, length, width):
        self.length = length
        self.width = width
# ...existing code...
```

Gotcha: `self` must be the first parameter of instance methods (conventionally named `self`).

GPT-5 mini • 1x

## TASK-5:

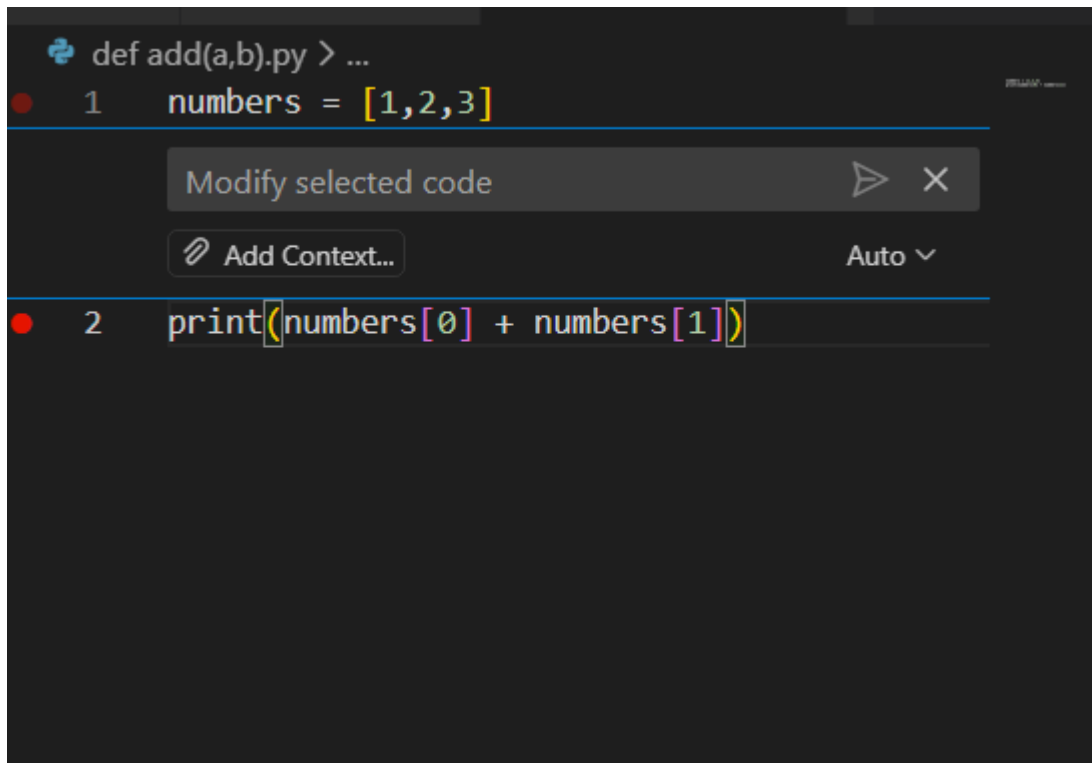
```
def add(a,b).py > ...
1  numbers = [1,2,3]
2  print(numbers[5])

PROBLEMS  OUTPUT  TERMINAL  ...  + v ... |

^C
PS C:\Users\ramya\OneDrive\Desktop\coding>&
C:/Users/ramya/AppData/Local/Microsoft/Win
dowsApps/python3.11.exe "c:/Users/ramya/One
Drive/Desktop/coding/def add(a,b).py"
Traceback (most recent call last):
  File "c:\Users\ramya\OneDrive\Desktop\cod
ing\def add(a,b).py", line 2, in <module>
    print(numbers[5])
            ~~~~~^
IndexError: list index out of range
PS C:\Users\ramya\OneDrive\Desktop\coding>
```

Corrected code:





The screenshot shows a code editor with a dark theme. At the top, a file tab is labeled 'def add(a,b).py > ...'. The code is as follows:

```
1 numbers = [1,2,3]
```

Below the first line, there is a context menu with two options: 'Modify selected code' (with a right arrow icon) and 'Add Context...' (with a link icon). To the right of these options is a dropdown menu currently set to 'Auto' with a downward arrow.

```
2 print(numbers[0] + numbers[1])
```

The code on line 2 contains a syntax error: a closing parenthesis ')' is missing at the end of the print statement. The error is highlighted with a red dot at the beginning of the line.

Justification: The crash happens since the index is outside the list range. Bounds checking or try/except prevents the error and ensures safe access.