s

1 Z ro-shot: Leap Year

C: > Users > aakar > OneDrive > Documents > Online gdb > task_1.py > ...

```python
def is_leap_year(year: int) -> bool:
    return (year % 4 == 0) and (year % 100 != 0 or year % 400 == 0)

# User input
year = int(input("Enter a year: "))
print(f"Input: {year} → Output: {is_leap_year(year)}")

```

p

Output :

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
Enter a year: 2024
Input: 2024 → Output: True
PS C:\Users\aakar\AppData\Local\Programs\Microsoft VS Code>
```

2 One-shot: cm → inches

C: > Users > aakar > OneDrive > Documents > Online gdb > task_1.py > ...

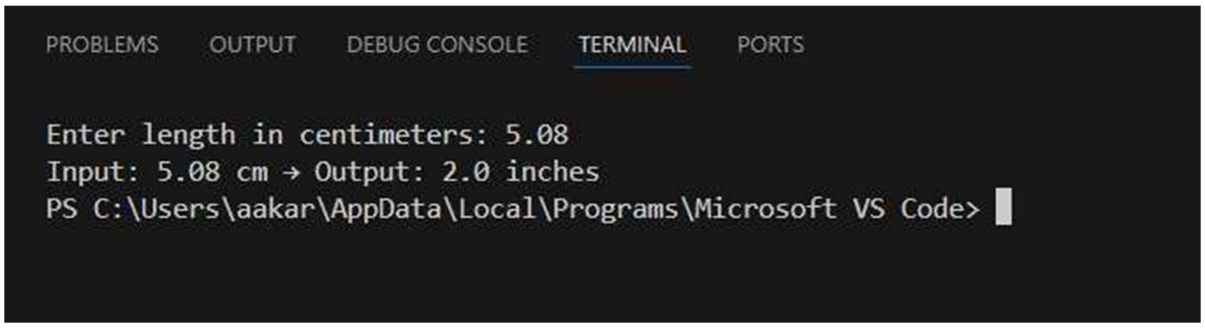
```python
def cm_to_inches(cm: float) -> float:
    return cm / 2.54

# User input
cm = float(input("Enter length in centimeters: "))
print(f"Input: {cm} cm → Output: {cm_to_inches(cm)} inches")

```

Task — e

Output :



Task — w

3 F -shot: Format name

```
C: > Users > aakar > OneDrive > Documents > Online gdb > task_1.py > ...
1   def format_name_last_first(full_name: str) -> str:
2       parts = [p for p in full_name.strip().split() if p]
3       if not parts:
4           return ""
5       if len(parts) == 1:
6           return parts[0]
7       last = parts[-1]
8       first_block = " ".join(parts[:-1])
9       return f"{last}, {first_block}"
10
11  # User input
12  name = input("Enter full name: ")
13  print(f"Input: {name} → Output: {format_name_last_first(name)}")
14
```

Output :

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

Enter full name: John Doe
Input: John Doe → Output: Doe, John
PS C:\Users\aakar\AppData\Local\Programs\Microsoft VS Code>
```

4 Vo el Counter

```
C: > Users > aakar > OneDrive > Documents > Online gdb > task_1.py > ...
1   def count_vowels(s: str, *, include_y: bool = False) -> int:
2       vowels = set("aeiou" + ("y" if include_y else ""))
3       return sum(ch.lower() in vowels for ch in s)
4
5   # User input
6   text = input("Enter a string: ")
7   print(f"Input: {text} → Output: {count_vowels(text)} vowels")
8
```

Task — ew

Output :

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Enter a string: qwertyuiop
Input: qwertyuiop → Output: 4 vowels
PS C:\Users\aakar\AppData\Local\Programs\Microsoft VS Code>
```

5 F -shot: Count lines in file

C: > Users > aakar > OneDrive > Documents > Online gdb > task_1.py > ...

```python
from pathlib import Path

def count_lines_in_file(path: str | Path) -> int:
    p = Path(path)
    if not p.exists():
        raise FileNotFoundError(f"No such file: {p}")
    with p.open("r", encoding="utf-8", errors="replace") as f:
        return sum(1 for _ in f)

# User input
file_name = input("Enter file name: ")
print(f"Input: {file_name} → Output: {count_lines_in_file(file_name)} lines")

```

Output :

```
Enter file name: qwerty1
Traceback (most recent call last):
  File "c:\Users\aakar\OneDrive\Documents\Online gdb\task_1.py", line 12, in <module>
    print(f"Input: {file_name} → Output: {count_lines_in_file(file_name)} lines")
                                          ~~~~~~~~~~~~~~~~~~~~^^^^^^^^^^^^
  File "c:\Users\aakar\OneDrive\Documents\Online gdb\task_1.py", line 6, in count_lines_in_file
    raise FileNotFoundError(f"No such file: {p}")
FileNotFoundError: No such file: qwerty1
PS C:\Users\aakar\AppData\Local\Programs\Microsoft VS Code>
```