Python code for Consecutive breaks?

**Програма ChatGPT сказала:**



Here is a Python code snippet to identify consecutive breaks in a list of points. The code will group consecutive breaks into ranges for better analysis:

python

Копіювати код

def find\_consecutive\_breaks(points):

"""

Identifies consecutive breaks in a list of points.

:param points: List of break points (sorted integers).

:return: List of tuples representing consecutive ranges.

"""

if not points:

return []

consecutive\_ranges = []

start = points[0]

prev = points[0]

for point in points[1:]:

if point == prev + 1:

# Continue the consecutive range

prev = point

else:

# End of a consecutive range

consecutive\_ranges.append((start, prev))

start = point

prev = point

# Append the last range

consecutive\_ranges.append((start, prev))

return consecutive\_ranges

# Example usage

break\_points = [

1463963,

1572176, 1572177, 1572178, 1572179, 1572180, 1572181, 1572182, 1572183

]

consecutive\_breaks = find\_consecutive\_breaks(break\_points)

print("Consecutive Breaks:", consecutive\_breaks)

**Output**

The script will output the ranges of consecutive breaks:

less

Копіювати код

Consecutive Breaks: [(1463963, 1463963), (1572176, 1572183)]

**Explanation**

* **Input**: A list of break points (sorted).
* **Output**: A list of tuples. Each tuple represents a range of consecutive breaks, where the start and end points are specified.
* **Logic**:
  + Iterate through the points.
  + Detect when a break in the sequence occurs and save the range.
  + Handle the final range after the loop ends.

This code can be adapted for larger datasets or integrated into signal analysis workflows.