# How to Calculate a Reversed Cumulative Sum in Pandas

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In Pandas, a reversed cumulative sum can be calculated by using the df.iloc.cumsum() method. This will calculate the cumulative sum in reverse order, starting from the last element and adding all preceding elements until the first element of the series is reached. This can be useful for analyzing data in different ways or for creating a running total.

The function can be used to calculate the cumulative sum of values in a column of a pandas DataFrame.

You can use the following syntax to calculate a **reversed cumulative sum** of values in a column:

**df = df.loc.cumsum()**

This particular syntax adds a new column called **cumsum_reverse** to a pandas DataFrame that shows the reversed cumulative sum of values in the column titled **my_column**.

The following example shows how to use this syntax in practice.

## Example: Calculate a Reversed Cumulative Sum in Pandas

Suppose we have the following pandas DataFrame that shows the total sales made by some store during 10 consecutive days:

**import pandas as pd**

#create DataFrame
df = pd.DataFrame({'day': ,
'sales': })

#view DataFrame
df

day sales
0 1 3
1 2 6
2 3 0
3 4 2
4 5 4
5 6 1
6 7 0
7 8 1
8 9 4

9 10 7

We can use the following syntax to calculate a **reversed cumulative sum** of the sales column:

**#add new column that shows reverse cumulative sum of sales**
**df = df.loc.cumsum()**

#view updated DataFrame
df

day sales cumsum_reverse_sales
0 1 3 28
1 2 6 25
2 3 0 19
3 4 2 19
4 5 4 17
5 6 1 13
6 7 0 12
7 8 1 12
8 9 4 11
9 10 7 7

The new column titled **cumsum_reverse_sales** shows the cumulative sales *starting from the last row*.

Here's how we would interpret the values in the **cumsum_reverse_sales** column:

The cumulative sum of sales for day 10 is **7**.
The cumulative sum of sales for day 10 and day 9 is **11**.
The cumulative sum of sales for day 10, day 9, and day 8 is **12**.
The cumulative sum of sales for day 10, day 9, day 8, and day 7 is **12**.

And so on.