



## What is a Composed Function?

A **composed function** is when the **output of one function becomes the input of another** — like  $f(g(x))$

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### Super Simple Example

#### 🎯 Task:

You want to take a number  $\rightarrow$  double it  $\rightarrow$  then square it.

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#### ◇ Step 1: Define simple functions

```
def double(x):  
    return x * 2
```

```
def square(x):  
    return x ** 2
```

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#### ◇ Step 2: Compose them manually

```
def composed(x):  
    return square(double(x)) # f(g(x))  $\rightarrow$  square of (x * 2)
```

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#### ◇ Usage

```
print(composed(3)) # 36  
# double(3) = 6  $\rightarrow$  square(6) = 36
```

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## Summary:

**Function**

**Output**

`double(3)` 6

`square(6)` 36

`composed( square(double(3))`  
`3) = 36`

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### ☒ TL;DR:

Composed function =  $f(g(x))$

Apply  $g()$  first  $\rightarrow$  pass result to  $f()$

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## **About the Author**

**Gowtham SB** is a **Data Engineering expert, educator, and content creator** with a passion for **big data technologies, as well as cloud and Gen AI**. With years of experience in the field, he has worked extensively with **cloud platforms, distributed systems, and data pipelines**, helping professionals and aspiring engineers master the art of data engineering.

Beyond his technical expertise, Gowtham is a **renowned mentor and speaker**, sharing his insights through engaging content on **YouTube and LinkedIn**. He has built one of the **largest Tamil Data Engineering communities**, guiding thousands of learners to excel in their careers.

Through his deep industry knowledge and hands-on approach, Gowtham continues to **bridge the gap between learning and real-world implementation**, empowering individuals to build **scalable, high-performance data solutions**.

## **Socials**

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