

# Function Dependencies Analysis

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```
def multiply(x, y):  
    return x * y
```

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

```
def compute_total(x, y, z):  
    return add(multiply(x, y), z)  
dependencies?
```



Thought for a few seconds ▾

The dependencies among the functions are as follows:

- `multiply(x, y)` : This function does not depend on any other functions; it simply returns the product of `x` and `y`.
- `add(a, b)` : This function is also independent and returns the sum of `a` and `b`.
- `compute_total(x, y, z)` : This function depends on both `multiply` and `add`. It first calls `multiply(x, y)` to compute the product of `x` and `y`, and then uses `add(result, z)` to add `z` to that product.

## Dependency Hierarchy:

- `compute_total` → depends on `multiply` and `add`
  - `multiply` → independent
  - `add` → independent

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