

Short Answer:

✓ Yes — method overriding is a form of *runtime polymorphism*.

Let's break it down

1 Polymorphism means:

“Many forms” — same method name, but different behavior depending on the object.

It's a **broad concept** that can appear in multiple ways (both compile-time and runtime, depending on the language).

2 Method Overriding

When a **child class** defines a method that already exists in its **parent class**, and gives it a new implementation.

So when you call that method on an object, **Python decides at runtime** which version to use (the parent's or the child's).

That's exactly **runtime polymorphism**.


Example

```
class Car:
    def fuel_type(self):
        return "Petrol or Diesel"

class ElectricCar(Car):
    def fuel_type(self):
        return "Electric Charge"

vehicles = [Car(), ElectricCar()]
```

```
for v in vehicles:
    print(v.fuel_type())
```

 Output:

```
Petrol or Diesel
Electric Charge
```

Here:

- Both objects respond to the same message (`fuel_type()`),
- But **each behaves differently** → *polymorphism in action*.

So in summary

Concept	Description
Polymorphism	The <i>concept</i> — same interface, different behavior.
Method Overriding	A <i>way to implement</i> polymorphism using inheritance.
When it happens	At runtime , when the program decides which version to call.

For contrast — Python also supports:

- **Overloading (compile-time polymorphism)** → same function name, different parameters.
But Python doesn't truly support overloading like Java or C++; it uses *default arguments* or `*args` instead.

So yes:

Method overriding is one of the main techniques used to achieve **polymorphism** in Object-Oriented Programming — specifically **runtime polymorphism**.