

```

function sub(uint256 x, uint256 y) public pure returns (uint256 z)
{
    assembly {
        if gt(y, x) {
            z := sub(y, x) // gas: 8
            mstore(0x0, z)
            return(0x0, 32)
        }
        if gt(x, y) {
            z := sub(x, y) // gas: 8
            mstore(0x0, z)
            return(0x0, 32)
        }
    }
}

```

```

> forge test --match-test testSub
[=] Compiling...
[=] Compiling 2 files with 0.8.18
[=] Solc 0.8.18 finished in 931.12ms
Compiler run successful!

```

```

Running 1 test for test/Yul1.t.sol:Yul1Test
[PASS] testSub() (gas: 5562)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 3.32ms
Ran 1 test suites: 1 tests passed, 0 failed, 0 skipped (1 total tests)

```

```

function sub(uint256 x, uint256 y) public pure returns (uint256)
{
    assembly {
        if gt(y, x) {
            mstore(0x0, sub(y, x))
            return(0x0, 32)
        }
        if gt(x, y) {
            mstore(0x0, sub(x, y))
            return(0x0, 32)
        }
    }
}

```

```

> forge test --match-test testSub
[=] Compiling...
[=] Compiling 2 files with 0.8.18
[=] Solc 0.8.18 finished in 935.23ms
Compiler run successful with warnings:
Warning (6321): Unnamed return variable can remain unassigned. Add an explicit return with value to all non-reverting code paths or name the variable.
--> src/Yul1.sol:26:61:

```

```

26 |         function sub(uint256 x, uint256 y) public pure returns (uint256) {
    |                                                                    ^^^^^^

```

```

Running 1 test for test/Yul1.t.sol:Yul1Test
[PASS] testSub() (gas: 5554)
Test result: ok. 1 passed; 0 failed; 0 skipped; finished in 451.04µs
Ran 1 test suites: 1 tests passed, 0 failed, 0 skipped (1 total tests)

```