

The following opcodes are used for **Modulus**:

- MODI — Mod by Signed Integer
- MODU — Mod by Unsigned Integer

---

### MODI — *Mod by Signed Integer* {#MODI}

```
L2 = L2 % <signed_imm>
L2 = L2 % <reg_val>
L2 = L2 % <const>
```

=== "MODI Example"

```
```linenums="1" hl_lines="1 3 5"
; imm +ve
MODI    1
; imm -ve
MODI    -123
; reg val
MODI    val(QT)
; const
MODI    SOME_CONST_VAL

```
```

=== "MODI Properties"

| Opcode | Operand Type          | Destination   |
|--------|-----------------------|---------------|
| -----  | -----                 | -----         |
| 17     | Signed 64-bit integer | L2 (implicit) |

### MODU — *Mod by Unsigned Integer* {#MODU}

```
L3 = L3 % <unsigned_imm>
L3 = L3 % <reg_val>
L3 = L3 % <const>
```

=== "MODU Example"

```
```linenums="1" hl_lines="1 3 5"
; imm +ve
    MODU    1
; reg val
    MODU    val(QT)
; const
    MODU    SOME_CONST_VAL

```
```

=== "MODU Properties"

| Opcode | Operand Type          | Destination   |
|--------|-----------------------|---------------|
| -----  | -----                 | -----         |
| 22     | Unsigned 64-bit value | L3 (implicit) |

---