- Start
- Read a number
- IF prime :
  - If odd :
    - print the number is prime and odd.
  - else :
    - print the number is prime and even.
- Else :
  - if odd:
    - print the number is odd but not prime.
  - else :
    - print the number is even but not prime.
- End.

```
                                                    ┌──────────────────┐
   ╭─────────╮        ┌──────────────────┐          │                  │
  │           │       │                  │          │     Even/Odd?    │
  │   Start   │──────▶│  Read a number   │────┐    ╱╲                  ╱╲
  │           │       │                  │    │   ╱    Prime?    Yes    ╲
   ╰─────────╯        └──────────────────┘    │  ╱                  ╲
                                              ▼  ╲                  ╱
        Invalid ───────────────────────────  ╱╲   ╲    Even/Odd?  ╱
                                            ╱    ╲   ╲          ╱
                                           ╲      ╱
                                            ╲    ╱   NO
                                             ╲  ╱
                                              ╲╱
                                               │ Invalid
                                               ▼
  ┌────────────────────────────────┐      ╱╲
  │                                │◀────╱    ╲  Invalid
  │ The number is not prime or even │    ╲ Even/Odd? ╱
  │          or odd.               │     ╲      ╱
  │   The number is invalid.       │      ╲    ╱   Odd
  │                                │       ╲  ╱
  └────────────────────────────────┘        ╲╱
                                      Even
```

The number is not prime or even or odd.
The number is invalid.

Start

Read a number

Prime?

Even/Odd?

Invalid

Yes

NO

Invalid

Even/Odd?

Invalid

Even

Odd

Even

Odd

The number is Even

The number is odd

The number is prime and even

The number is prime and odd

END