Biodata Collection Program

This notebook collects and displays user biodata with input validation.

- Collects name, gender, age, and address
- Validates all inputs
- Displays formatted biodata when all inputs are valid

In [3]:
```python
def get_validated_input(prompt, validator_func=None, error_message=None):
    """Get user input with optional validation"""
    while True:
        value = input(prompt)
        if validator_func is None or validator_func(value):
            return value
        print(error_message)

def validate_not_empty(value):
    """Validate that input is not empty"""
    return value.strip() != ""

def validate_numeric(value):
    """Validate that input is numeric"""
    return value.isdigit()

def validate_gender(value):
    """Validate gender input"""
    return value.upper() in ["L", "P"]

def format_gender(gender_code):
    """Convert gender code to full text"""
    gender_code = gender_code.upper()
    if gender_code == "L":
        return "Laki-laki"
    elif gender_code == "P":
        return "Perempuan"
    return "Tidak diketahui"
```

In [4]:
```python
# Collect user input with validation
nama = get_validated_input(
    "Masukkan nama Anda: ",
    validator_func=validate_not_empty,
    error_message="Nama tidak boleh kosong. Silakan coba lagi."
)

kelamin_kode = get_validated_input(
    "Masukkan jenis kelamin Anda (L/P): ",
    validator_func=validate_gender,
    error_message="Jenis kelamin harus L atau P. Silakan coba lagi."
)
kelamin = format_gender(kelamin_kode)
```

```
umur = get_validated_input(
    "Masukkan umur Anda: ",
    validator_func=validate_numeric,
    error_message="Umur harus berupa angka. Silakan coba lagi."
)

alamat = get_validated_input(
    "Masukkan alamat Anda: ",
    validator_func=validate_not_empty,
    error_message="Alamat tidak boleh kosong. Silakan coba lagi."
)
```

In [ ]:

```
# Format and display biodata
from IPython.display import HTML, display

biodata_html = f"""
<div style="background-color:#f0f0f0; padding:15px; border-radius:10px; width:400px
    <h2 style="color:#333; text-align:center;">Biodata</h2>
    <hr>
    <p><b>Nama:</b> {nama}</p>
    <p><b>Jenis Kelamin:</b> {kelamin}</p>
    <p><b>Umur:</b> {umur} tahun</p>
    <p><b>Alamat:</b> {alamat}</p>
</div>
"""

display(HTML(biodata_html))

# Plain text output
print("\nBiodata Anda:")
print(f"Nama: {nama}")
print(f"Jenis Kelamin: {kelamin}")
print(f"Umur: {umur} tahun")
print(f"Alamat: {alamat}")
```

Biodata

Nama: hasan

Jenis Kelamin: Laki-laki

Umur: 34 tahun

Alamat: sukabumi

```
Biodata Anda:
Nama: hasan
Jenis Kelamin: Laki-laki
Umur: 34 tahun
Alamat: sukabumi
```