

Nama : I Gusti Adnan Sanubi / 5520123123

```
import 'package:flutter/material.dart';
```

```
void main() {  
  runApp(const Kalkulator());  
}
```

```
class Kalkulator extends StatelessWidget {  
  const Kalkulator({super.key});  
  
  @override  
  Widget build(BuildContext context) {  
  
    return const MaterialApp(  
      debugShowCheckedModeBanner: false,  
      title: 'Kalkulator BMI', home: BMIScreen());  
  }  
}
```

```
class BMIScreen extends StatefulWidget {  
  const BMIScreen({super.key});  
  
  @override  
  State<BMIScreen> createState() => _BMIScreenState();  
}
```

```
class _BMIScreenState extends State<BMIScreen> {  
  final _berat = TextEditingController();  
  final _tinggi = TextEditingController();  
  
  String? _gender;  
  double? _hasil;  
  String? _keterangan;  
  
  void _hitungBMI() {  
    final double weight = double.tryParse(_berat.text) ?? 0;  
    final double height = double.tryParse(_tinggi.text) ?? 0;
```

The screenshot shows a mobile application titled "Kalkulator BMI" with a red header. The interface is light blue and contains the following elements: a "Berat Badan (kg)" input field with a scale icon, a "Tinggi Badan (cm)" input field with a height icon, a "Pilih Jenis Kelamin:" section with "Laki-laki" and "Perempuan" buttons, a green "Hitung BMI" button, a red "Reset" button, a "Hasil BMI:" label, and a large light blue box with "--" and the text "Masukkan data".

```

setState() {

    if (_gender != null && weight > 0 && height > 0) {

        final double heightInM = height / 100;

        final double bmi = weight / (heightInM * heightInM);

        _hasil = bmi;

        if (_gender == 'Laki-laki') {

            if (bmi < 18.5) {

                _keterangan = "Kurus";

            } else if (bmi < 25) {

                _keterangan = "Ideal";

            } else if (bmi < 30) {

                _keterangan = "Gemuk";

            } else {

                _keterangan = "Obesitas";

            }

        } else if (_gender == 'Perempuan') {

            if (bmi < 18) {

                _keterangan = "Kurus";

            } else if (bmi < 24) {

                _keterangan = "Ideal";

            } else if (bmi < 29) {

                _keterangan = "Gemuk";

            } else {

                _keterangan = "Obesitas";

            }

        }

    } else {

        _hasil = null;

        _keterangan = "Masukkan data yang sesuai dan pilih jenis kelamin!";

    }

});

}

void _restart() {

    setState() {

        _berat.clear();

        _tinggi.clear();

    }

}

```

```
    _hasil = null;
    _keterangan = null;
    _gender = null;
  });
}
```

```
@override
```

```
Widget build(BuildContext context) {
  return Scaffold(
    backgroundColor: Colors.lightBlue[50],
    appBar: AppBar(
      backgroundColor: const Color.fromARGB(255, 255, 68, 68),
      title: const Text(
        "Kalkulator BMI",
        style: TextStyle(color: Colors.white),
      ),
    ),
    body: Padding(
      padding: const EdgeInsets.all(16),
      child: Column(
        children: [
          const SizedBox(height: 10),
          TextField(
            controller: _berat,
            decoration: const InputDecoration(
              labelText: 'Berat Badan (kg)',
              prefixIcon: Icon(Icons.monitor_weight),
            ),
            keyboardType: TextInputType.number,
          ),
          const SizedBox(height: 10),
          TextField(
            controller: _tinggi,
            decoration: const InputDecoration(
              labelText: 'Tinggi Badan (cm)',
              prefixIcon: Icon(Icons.height),
            ),
            keyboardType: TextInputType.number,
```

```

    ),
    const SizedBox(height: 25),
    const Text(
      "Pilih Jenis Kelamin:",
      style: TextStyle(fontSize: 16, fontWeight: FontWeight.bold),
    ),
    const SizedBox(height: 10),
    Row(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
        ElevatedButton(
          onPressed: () {
            setState(() {
              _gender = "Laki-laki";
            });
          },
          style: ElevatedButton.styleFrom(
            backgroundColor: _gender == "Laki-laki"
              ? Colors.blue
              : Colors.white,
          ),
          child: const Text("Laki-laki"),
        ),
        const SizedBox(width: 20),
        ElevatedButton(
          onPressed: () {
            setState(() {
              _gender = "Perempuan";
            });
          },
          style: ElevatedButton.styleFrom(
            backgroundColor: _gender == "Perempuan"
              ? Colors.pink
              : Colors.white,
          ),
          child: const Text("Perempuan"),
        ),
      ],
    ),
  ],

```

```

    ),
    const SizedBox(height: 25),
    ElevatedButton(
      onPressed: _hitungBMI,
      style: ElevatedButton.styleFrom(
        backgroundColor: Colors.green,
        padding: const EdgeInsets.symmetric(
          horizontal: 30,
          vertical: 12,
        ),
      ),
    ),
    child: const Text("Hitung BMI"),
  ),
  const SizedBox(height: 10),
  ElevatedButton(
    onPressed: _restart,
    style: ElevatedButton.styleFrom(
      backgroundColor: Colors.redAccent,
      padding: const EdgeInsets.symmetric(
        horizontal: 30,
        vertical: 12,
      ),
    ),
    child: const Text("Reset"),
  ),
  const SizedBox(height: 30),
  const Text(
    "Hasil BMI:",
    style: TextStyle(fontSize: 18, fontWeight: FontWeight.bold),
  ),
  const SizedBox(height: 10),
  Container(
    decoration: BoxDecoration(
      color: const Color.fromARGB(255, 179, 237, 255),
      borderRadius: BorderRadius.circular(10),
    ),
    padding: const EdgeInsets.all(20),
    child: Column(

```

```
children: [
  Text(
    _hasil != null ? _hasil!.toStringAsFixed(1) : '---',
    style: const TextStyle(
      fontSize: 36,
      fontWeight: FontWeight.bold,
    ),
  ),
  const SizedBox(height: 5),
  Text(
    _keterangan ?? 'Masukkan data',
    style: const TextStyle(fontSize: 18),
    textAlign: TextAlign.center,
  ),
],
),
],
),
],
),
),
);
}
```