

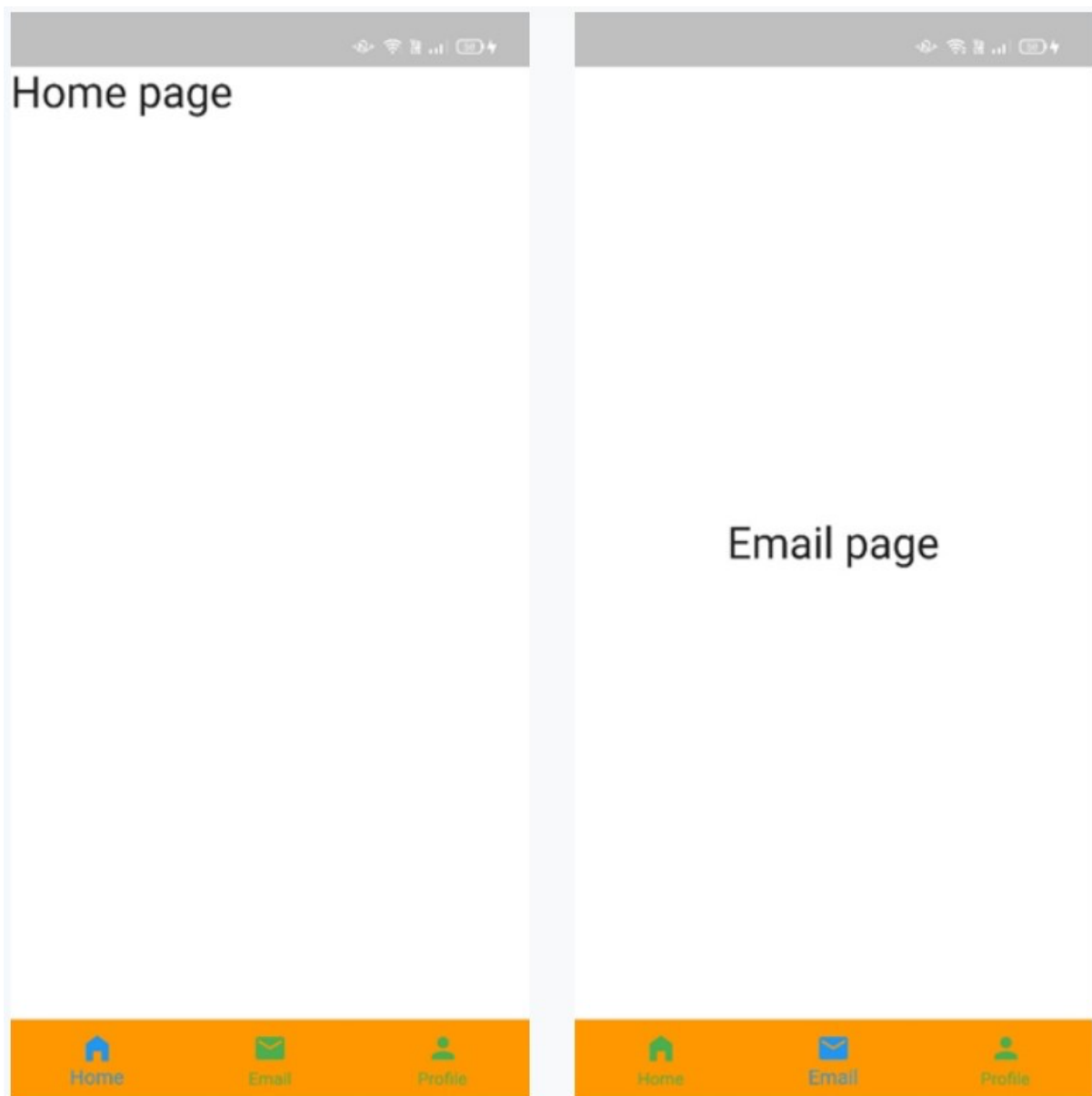
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Soal:

Buatlah aplikasi Flutter dengan tampilan seperti di bawah ini menggunakan SafeArea dan PageView:



Jawab:

Source code:

Main.dart

```

import 'package:flutter/material.dart';

void main() {
  runApp(MyApp());
}

class MyApp extends StatefulWidget {
  @override
  _MyAppState createState() => _MyAppState();
}

class _MyAppState extends State<MyApp> {
  // Controller for PageView
  PageController _pageController = PageController();
  int _selectedIndex = 0;

  // Function to handle page navigation
  void _onItemTapped(int index) {
    setState(() {
      _selectedIndex = index;
      _pageController.animateToPage(index,
        duration: Duration(milliseconds: 300), curve: Curves.easeInOut);
    });
  }

  @override
  Widget build(BuildContext context)
  { return MaterialApp(  home:
  Scaffold(
    // SafeArea to prevent overlapping with status bar
    body: SafeArea(      child: PageView(
    controller: _pageController,
      onPageChanged: (index) {
    setState(() {
      _selectedIndex = index;
    });
  },
    children: [
      // Pages for Home, Email, and Profile
      Center(child: Text('Home page', style: TextStyle(fontSize: 24))),
      Center(child: Text('Email page', style: TextStyle(fontSize: 24))),
      Center(
        child: Text('Profile page', style:
  TextStyle(fontSize: 24))),
    ],

```

```
    ),  
    ),  
    // Bottom Navigation Bar  
    bottomNavigationBar: BottomNavigationBar(  
items: const <BottomNavigationBarItem>[
```

```

        BottomNavigationBarItem(          icon:
Icon(Icons.home),
        label: 'Home',
    ),
        BottomNavigationBarItem(          icon:
Icon(Icons.email),
        label: 'Email',
    ),
        BottomNavigationBarItem(          icon:
Icon(Icons.person),
        label: 'Profile',
    ),
    ],
    currentIndex: _selectedIndex,
    selectedItemColor: Colors.green,
    unselectedItemColor: Colors.grey,
    backgroundColor: Colors.orange,
    onTap: _onItemTapped,
  ),
),
); }
}

```

Source Code widget_test.dart

```
import 'package:flutter/material.dart'; import
'package:flutter_test/flutter_test.dart';
import 'package:tugas5_advance_layout/main.dart'; // Pastikan import ini sesuai
dengan nama aplikasi Anda.
```

```
void main() {
  testWidgets('Test bottom navigation bar and page view',
    (WidgetTester tester) async {
    // Build the app and trigger a frame.
    await tester.pumpWidget(MyApp());

    // Verify that initially the Home page is displayed.
    expect(find.text('Home page'), findsOneWidget);
    expect(find.text('Email page'), findsNothing);    expect(find.text('Profile
page'), findsNothing);

    // Tap the 'Email' icon and trigger a frame.
    await tester.tap(find.byIcon(Icons.email));    await
    tester.pumpAndSettle();

    // Verify that the Email page is displayed.
    expect(find.text('Home page'), findsNothing);
```

```
    expect(find.text('Email page'), findsOneWidget);
    expect(find.text('Profile page'), findsNothing);

    // Tap the 'Profile' icon and trigger a frame.
    await tester.tap(find.byIcon(Icons.person));
    await tester.pumpAndSettle();

    // Verify that the Profile page is displayed.
    expect(find.text('Home page'), findsNothing);
    expect(find.text('Email page'), findsNothing);
    expect(find.text('Profile page'), findsOneWidget);

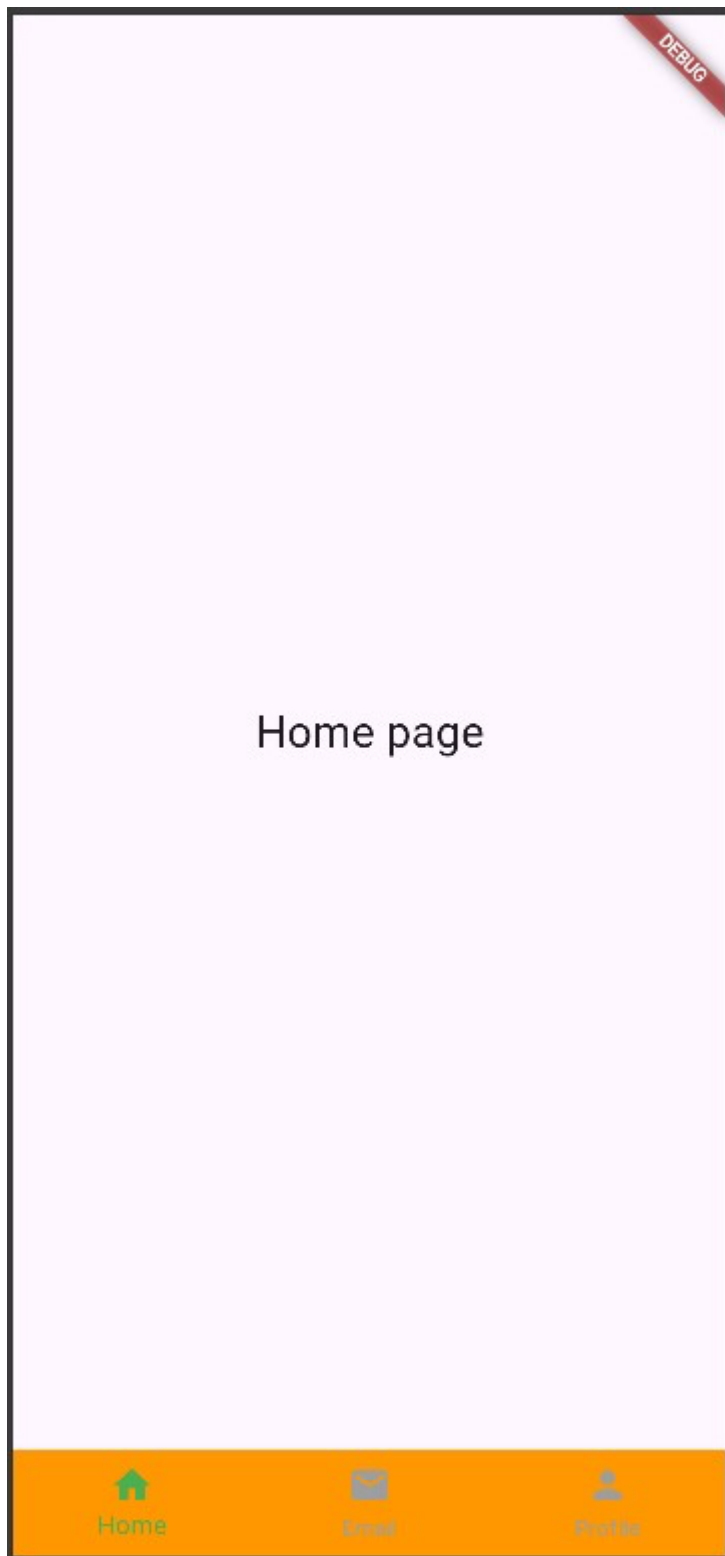
    // Tap the 'Home' icon and trigger a frame.
    await tester.tap(find.byIcon(Icons.home));
    await tester.pumpAndSettle();

    // Verify that the Home page is displayed again.
    expect(find.text('Home page'), findsOneWidget);
    expect(find.text('Email page'), findsNothing);
    expect(find.text('Profile page'), findsNothing);
  });
```

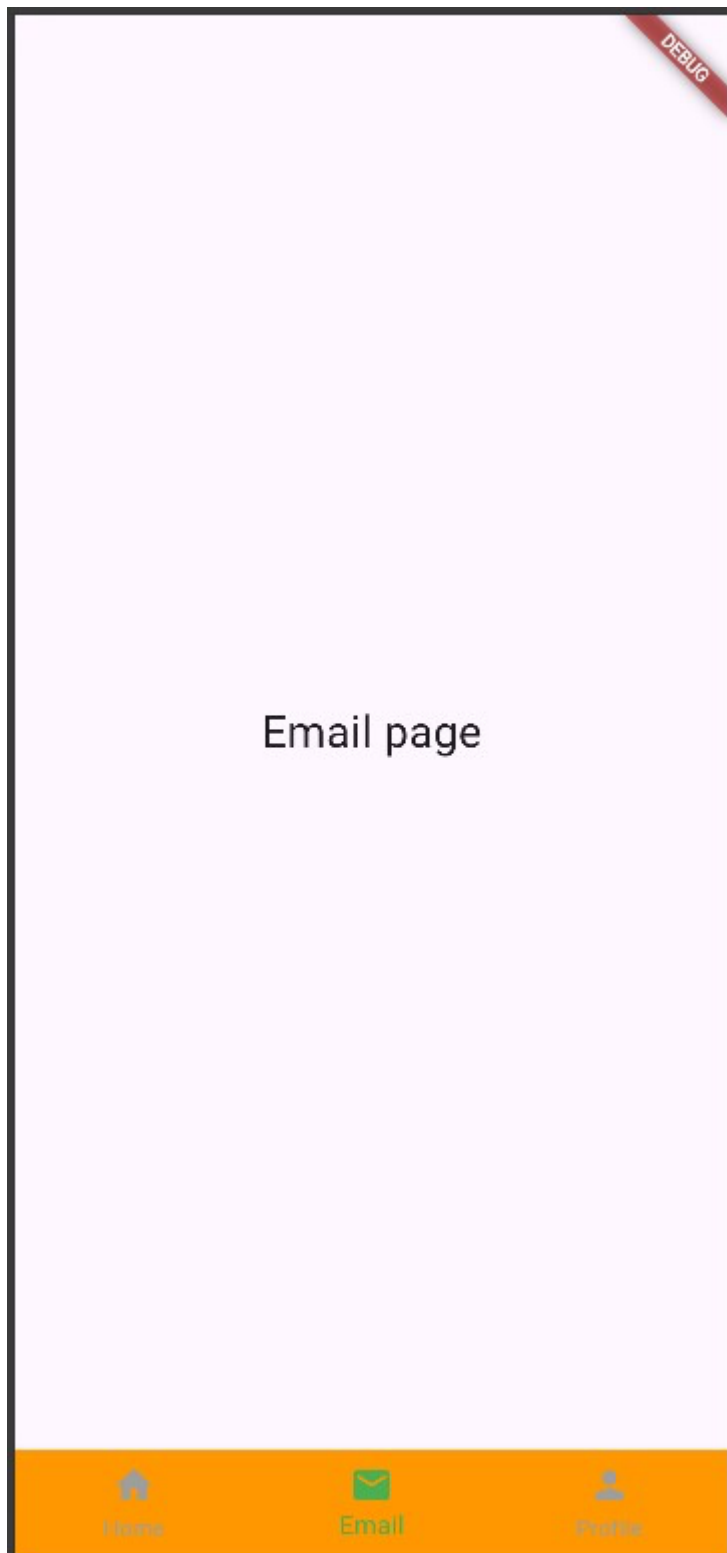
```
}
```

Output:

Home page



Email page



Profile page

DEBUG

Profile page



Home



Mail



Profile