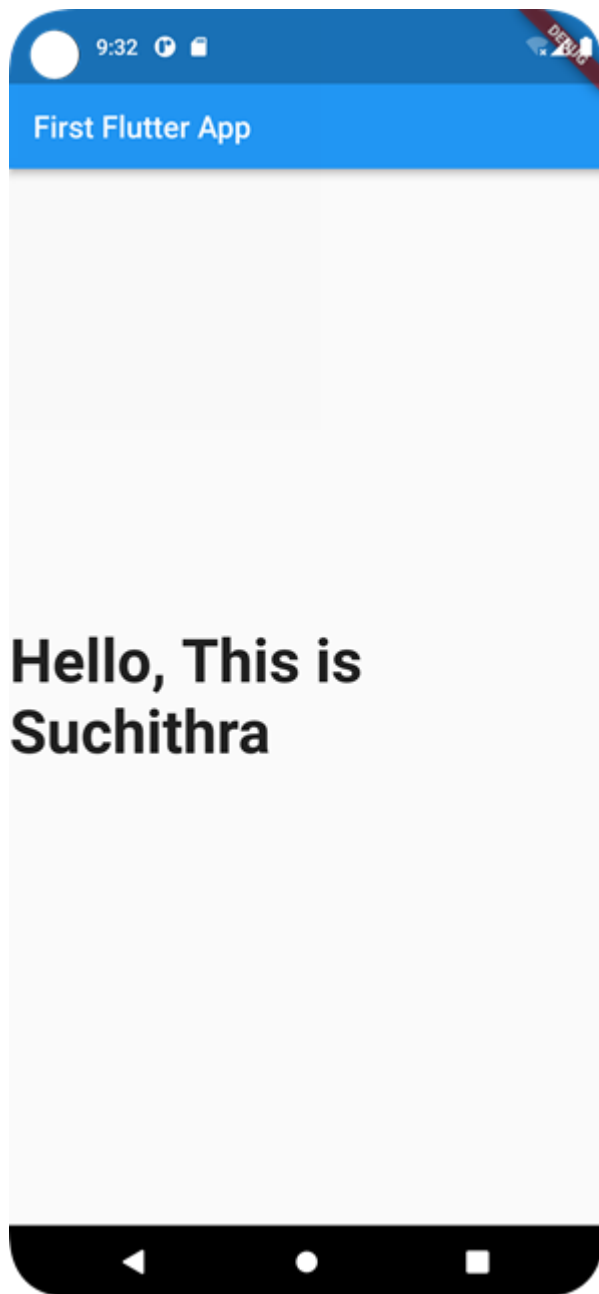Name: Suchithra Raj M
USN: 1NT19IS162

FLUTTER BASICS

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

import 'package:flutter/material.dart';



void main() {

 runApp(

        MaterialApp(

        home: Scaffold(

        appBar: AppBar(

        title: Text("First Flutter App"),

        ),

        body: Center(

        child: Text(

        "Hello, This is Suchithra",

        style: TextStyle(

         fontSize: 40.0,

        fontStyle: FontStyle.normal,

        fontWeight: FontWeight.bold

        ),

        ),

        ),

        ),

        )



 );
```
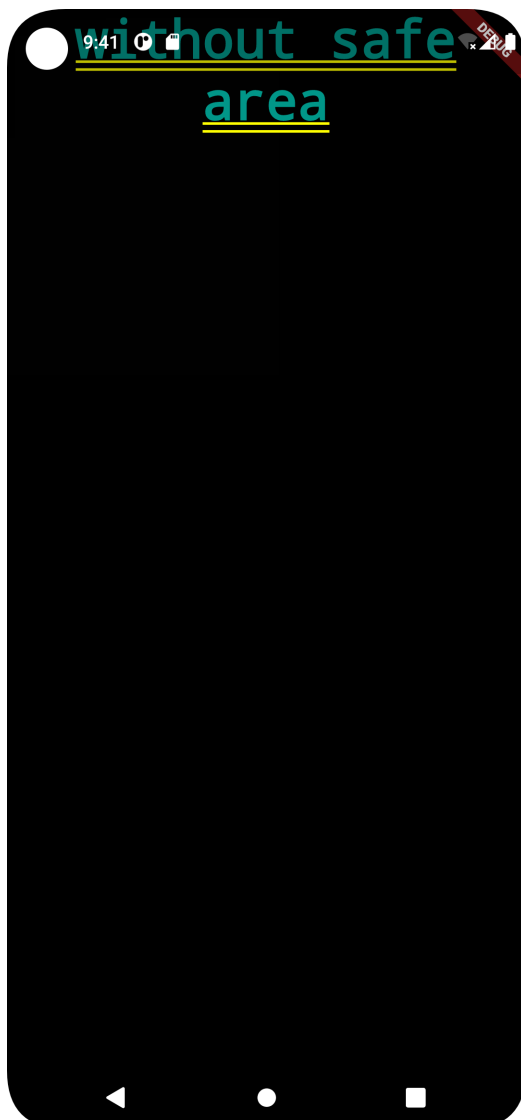
}

OUTPUT:

Name: Suchithra Raj M
USN: 1NT19IS162

1. Without safearea

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

void main() {
  runApp(MaterialApp(
    home: Text("without safe area",
    textAlign: TextAlign.center,
    style: TextStyle(
      fontSize: 40.0,
      fontWeight: FontWeight.bold,
      color: Colors.teal,
    ),
    ),
  )
  );
}
```
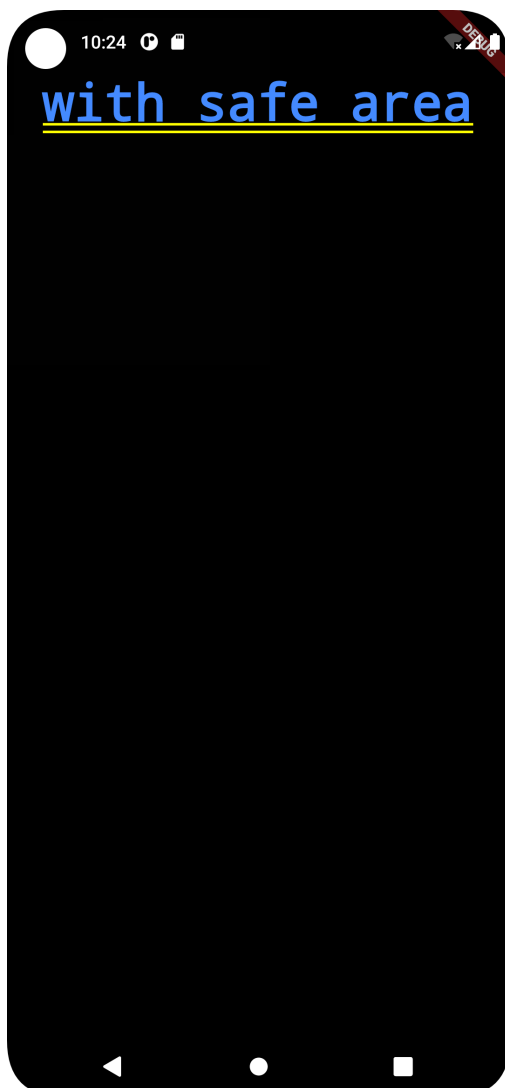
OUTPUT:

2. With safearea

```dart
import 'package:flutter/cupertino.dart';
import 'package:flutter/material.dart';
void main() {
  runApp(MaterialApp(
    home: SafeArea(
      child: Text("with safe area",
        textAlign: TextAlign.center,
        style: TextStyle(
          fontSize: 40.0,
          fontWeight: FontWeight.bold,
          color: Colors.blueAccent,
        ),
      ),
    ),
  )
  );

}
```

OUTPUT:

3. With scaffold

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

void main() {
  runApp(MaterialApp(
    home: Scaffold(
      appBar: AppBar(
        title: Text(
          "FLUTTER APP"
        ),

      ),
      body: Center(
        child: Text(
          "SHOWING USAGE OF SCAFFOLD",
          style: TextStyle(
            fontSize: 40,
            fontStyle: FontStyle.italic,
            fontWeight: FontWeight.normal,
            color: Colors.red,
          ),
        ),
      ),
    ),
  ));
}
```

OUTPUT:

4. Combination of scaffold and safearea

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

void main() {
  runApp(MaterialApp(
    home: Scaffold(
      appBar: AppBar(
        title: Text(
          "SCAFFOLD-SAFEAREA"
        ),
      ),
      body: Container(
        child: SafeArea(
          child: Center(
            child: Text(
              "COMBINATION OF SCAFFOLD AND SAFE AREA",
              style: TextStyle(
                fontSize: 40,
                fontStyle: FontStyle.italic,
                fontWeight: FontWeight.normal,
                color: Colors.cyan,
              ),
            ),
          )
        ),
      ),
    ),
  ));
}
```
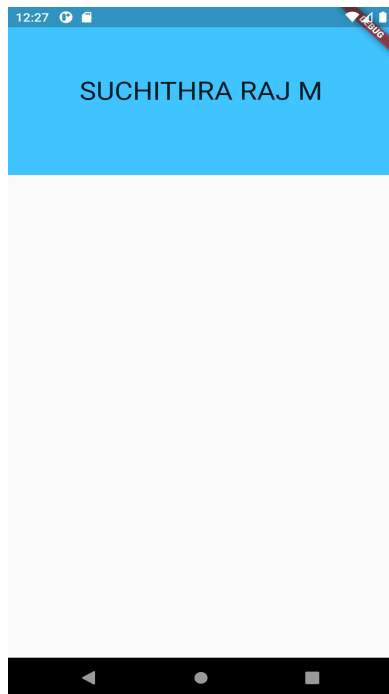
OUTPUT:

NAME: SUCHITHRA RAJ M
USN: 1NT19IS162

SINGLE CHILD WIDGET

1. CONTAINER WIDGET

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   home: MyPage(),
 ));
}
class MyPage extends StatefulWidget {
 const MyPage({Key? key}) : super(key: key);
 @override
 _MyPageState createState() => _MyPageState();
}
class _MyPageState extends State<MyPage> {
 @override
 Widget build(BuildContext context) {
   return Scaffold(
     body: Container(
       height: 200.0,
       width: double.infinity,
       color: Colors.lightBlueAccent,
       child: Center(
         child: Text(
           'SUCHITHRA RAJ M',
           style: TextStyle(color: Colors.black87, fontSize: 30),
         ),
       ),
     ),
   );
 }
}
```

OUTPUT:

2. CENTER WIDGET

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   home: MyPage(),
 ));
}
class MyPage extends StatefulWidget {
 const MyPage({Key? key}) : super(key: key);
 @override
 _MyPageState createState() => _MyPageState();
}
class _MyPageState extends State<MyPage> {
 @override
 Widget build(BuildContext context) {
   return Scaffold(
     body: Center(

       child: Text(
         'TED BUNTY',
         style: TextStyle(color: Colors.red, fontSize: 30),
       ),
```

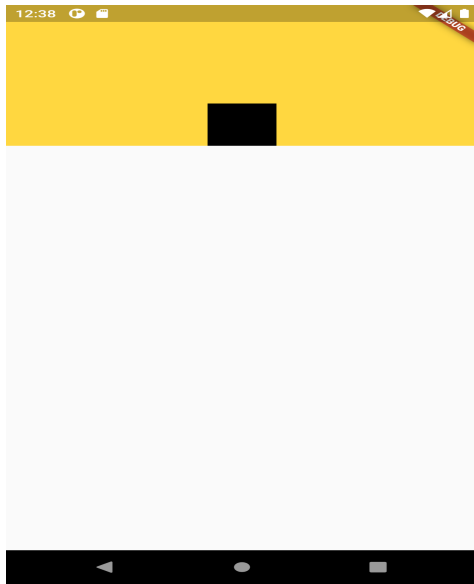```
      ),
    );
  }
}
```
OUTPUT:

3. ALIGN WIDGET

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   home: MyPage(),
 ));
}
class MyPage extends StatefulWidget {
 const MyPage({Key? key}) : super(key: key);
 @override

 _MyPageState createState() => _MyPageState();
}
class _MyPageState extends State<MyPage> {
 @override
 Widget build(BuildContext context) {
   return Scaffold(
     body: Container(
       height: 200.0,
       width: double.infinity,
       color: Colors.amberAccent,
       child: Align(
         alignment: Alignment.bottomCenter,
         child:Container(
           height: 60.0,
           width: 60.0,
           color: Colors.black,
         ),
       ),
     ),
   );
 }
}
```
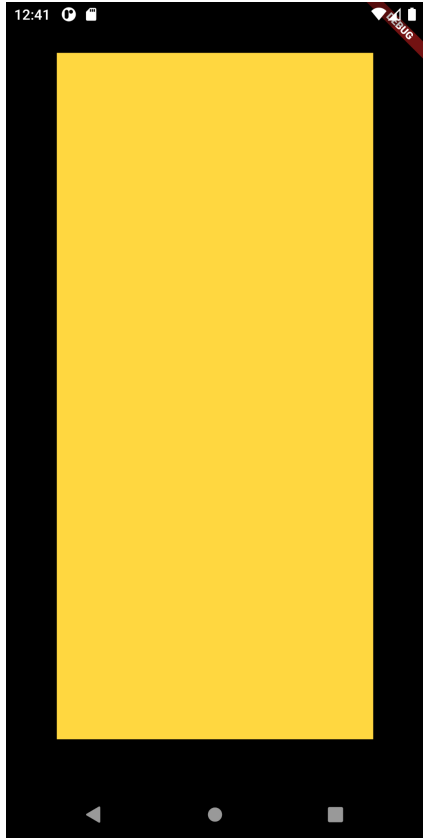
OUTPUT:

4. PADDING WIDGET

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   home: MyPage(),
 ));
}
class MyPage extends StatefulWidget {
 const MyPage({Key? key}) : super(key: key);
 @override
 _MyPageState createState() => _MyPageState();
}
class _MyPageState extends State<MyPage> {
 @override
 Widget build(BuildContext context) {
   return Padding(
     padding: const EdgeInsets.all(50.0),
     child: Container(
       height: 100.0,
       width: double.infinity,
       color: Colors.amberAccent,
     ),
   );
 }
}
```

OUTPUT:

5a) Build a utter app to demonstrate the usage of Row Widget and Experiment with its MainAxis and CrossAxis properties respectively

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   home: RowApp(),
 ));
}
class RowApp extends StatelessWidget {
 const RowApp({Key? key}) : super(key: key);
 @override
 Widget build(BuildContext context) {
   return Scaffold(
     body:Row(
       mainAxisAlignment: MainAxisAlignment.spaceEvenly,
       crossAxisAlignment: CrossAxisAlignment.start,
       children:[
         Container(
           height: 100,
           width: 100,
```

```dart
        color: Colors.blueGrey,
        child: Center(
          child: Text(
              'First Child'
          ),
        ),
      ),
      Container(
        height: 100,
        width: 100,
        color: Colors.indigoAccent,
        child: Center(
          child: Text(
              'Second Child'
          ),
        ),
      ),
      Container(
        height: 100,
        width: 100,
        color: Colors.black87,
        child: Center(
          child: Text(
              'Third Child'
          ),

        ),
      )
    ],
   )
  );
 }
}
```

OUTPUT:

5b) Build a utter app to demonstrate the usage of Column Widget and Experiment with its MainAxis and CrossAxis properties respectively.
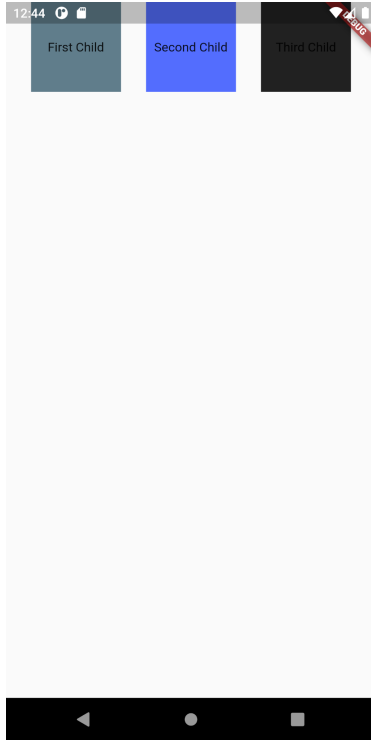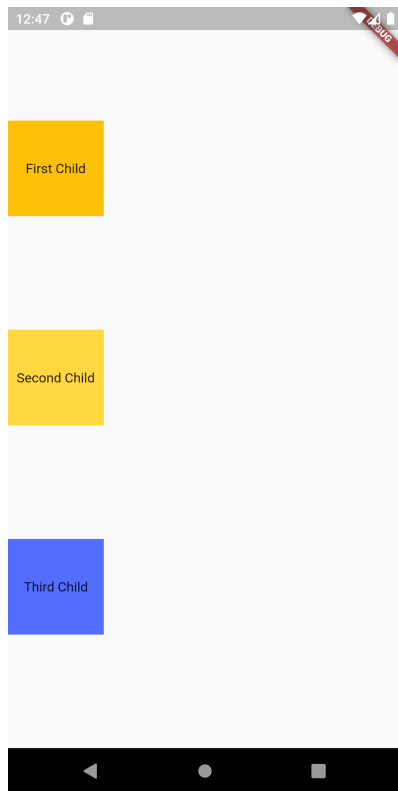
```dart
import 'package:flutter/cupertino.dart';
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   home: ColumnApp(),
 ));
}
class ColumnApp extends StatelessWidget {
 const ColumnApp({Key? key}) : super(key: key);
 @override

 Widget build(BuildContext context) {
   return Scaffold(
       body:Column(
         mainAxisAlignment: MainAxisAlignment.spaceEvenly,
         crossAxisAlignment: CrossAxisAlignment.start,
         children:[
           Container(
             height: 100,
             width: 100,
             color: Colors.amber,
             child: Center(
```

```
            child: Text(
                'First Child'
            ),
        ),
    ),
    Container(
        height: 100,
        width: 100,
        color: Colors.amberAccent,
        child: Center(
            child: Text(
                'Second Child'
            ),
        ),
    ),
    Container(
        height: 100,
        width: 100,
        color: Colors.indigoAccent,
        child: Center(
            child: Text(
                'Third Child'
            ),
        ),
    )
  ],
)
  );
 }
}
```

OUTPUT:

6.Diagonal

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(MaterialApp(
   debugShowCheckedModeBanner: false,
   home:SafeArea(
     child:ColumnApp(),
   ),
 ));
}
class ColumnApp extends StatefulWidget {
 const ColumnApp({Key? key}) : super(key: key);
 @override
 _ColumnAppState createState() => _ColumnAppState();
}
class _ColumnAppState extends State<ColumnApp> {
 @override
 Widget build(BuildContext context) {
   return Scaffold(
     body:Row(
       mainAxisAlignment: MainAxisAlignment.spaceBetween,
       children:[
```

```dart
        Column(
          mainAxisAlignment: MainAxisAlignment.start,
          children:[Container(
            height: 100,
            width: 100,
            color: Colors.indigoAccent,
            child: Center(
              child: Text(
                  'First Child'
              ),
            ),
          ),
          ],
        ),
        Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [Container(
            height: 100,
            width: 100,
            color: Colors.amberAccent,
            child: Center(
              child: Text(
                  'Second Child'
              ),
            ),
          ),
          ],
        ),
        Column(
          mainAxisAlignment: MainAxisAlignment.end,
          children:[Container(
            height: 100,
            width: 100,
            color: Colors.amber,
            child: Center(
              child: Text(
                  'Third Child'
              ),
            ),
          ),
          ],
        ),
      ],
    ),
  );
 }
}
```