1**. Develop an android application to design a visiting card with appropriate details.**

```
import 'package:flutter/material.dart';
void main() {
  runApp(visitingcard());
}
class visitingcard extends StatelessWidget {
  Widget build(BuildContext context) {
    return MaterialApp
      (

      home: Scaffold(
        backgroundColor: Colors.white,
        appBar: AppBar(
          title: Text('VISITING CARD', style: TextStyle(fontSize: 25),),
          backgroundColor: Colors.grey,
        ),
        body: Column(
          children: [
            Container(
              width: 430,
              color: Colors.blue,
              padding: EdgeInsets.all(30),
              child: Column(
                mainAxisAlignment: MainAxisAlignment.center,
                children: [
                  Row(
```

```
          children: [
            Image.asset(
              'assets/images/image1.png', width: 100, height: 120,),
            Text('Vidyavardhaka College\n Of Engineering',
              style: TextStyle(
                  fontSize: 20, color: Colors.white),)

          ],
        )
      ],
    )

),
Container(
  child: Column(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Image.asset(
        'assets/images/img_1.png', width: 150, height: 150,),
      Text('Keerthana C G\n',
        style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold),
        textAlign: TextAlign.center,),
      Text('Student\n Dept Of ISE', style: TextStyle(fontSize: 22),
        textAlign: TextAlign.center,),
      Text(
        'Mobile No:9632172923 \n Email:keerthanagirishchn@gmail.com',
        style: TextStyle(fontSize: 20),
```

```
                textAlign: TextAlign.center,),
            ],
          ),
        )
      ],

    ),

  ),

);
}
}
```

2. Develop a calculator android application that performs simple arithmetic operations like Addition, Subtraction, Multiplication, and Division.

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


void main() {
  runApp(const MyCalci());
}


class MyCalci extends StatelessWidget{
  const MyCalci({super.key});
  @override
  Widget build(BuildContext context){
    return MaterialApp(
      title:'Calculator',
      theme: ThemeData(
        primarySwatch:Colors.blue,


      ),
      home:const MyWidget(),
    );
}
}


class MyWidget extends StatefulWidget{
  const MyWidget({Key? key}) :super(key: key);
  @override
```

```
  State<MyWidget> createState() => _MyWidgetState();

}

class _MyWidgetState extends State<MyWidget>
{
  final TextEditingController firstCon= TextEditingController();
  final TextEditingController secCon= TextEditingController();
  double res=0;

  @override
  Widget build(BuildContext context){
    return Scaffold(
      appBar: AppBar(
        title: const Text('Calculator App'),
      ),
      body:Container(
        padding:const EdgeInsets.all(50),
        color:Colors.white,
        child:Column(children:[
          SizedBox(height:20,),
          TextField(
            controller:firstCon,
            decoration: const
InputDecoration(border:OutlineInputBorder(),hintText: "firstNum"),
            keyboardType:TextInputType.number,
          ),
```

```
        SizedBox(height:20,),
        TextField(
          controller:secCon,
          decoration: const
InputDecoration(border:OutlineInputBorder(),hintText: "secondNum"),
          keyboardType:TextInputType.number,
        ),
        SizedBox(height:20,),
        Row(
          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
  children: [
   ElevatedButton(onPressed:(){
     double a=double.parse(firstCon.text);
     double b=double.parse(secCon.text);
     setState((){
       res=a+b;
     });

   }, child: const Text("Add")),

       ElevatedButton(onPressed:(){
     double a=double.parse(firstCon.text);
     double b=double.parse(secCon.text);
     setState((){
       res=a-b;
     });
       }, child: const Text("Sub")),
```

```
  ElevatedButton(onPressed:(){
    double a=double.parse(firstCon.text);
    double b=double.parse(secCon.text);
    setState((){
      res=a*b;
    });
  }, child: const Text("Mul")),

  ElevatedButton(onPressed:(){
    double a=double.parse(firstCon.text);
    double b=double.parse(secCon.text);
    setState((){
      res=a/b;
    });
  }, child: const Text("Div")),

 ],
  ),


SizedBox(height:20,),
      Text('Result is: $res',style:TextStyle(fontSize:20),
      ),
      ],
  ),
   ),
```

```
  );
}}
```

3. Develop a simple application with one EditText so the user can write some text. Create a "Convert Text to Speech" button that converts the user input text into voice.

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

void main() {
  runApp(const TexttoSpeech());
}

class TexttoSpeech extends StatelessWidget {
  const TexttoSpeech({super.key});

  @override
  Widget build(BuildContext context) {
    return const MaterialApp(
      home:MyTexttoSpeech(),
    );
  }
}


class MyTexttoSpeech extends StatefulWidget {
  const MyTexttoSpeech({super.key});

  @override
  State<MyTexttoSpeech> createState() => _MyTexttoSpeechState();
}

class _MyTexttoSpeechState extends State<MyTexttoSpeech> {
  TextEditingController readText=TextEditingController();
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text("Text To Speech"),
        backgroundColor: Colors.green,
```

```
      ),
      body:Column(
        children:[
          TextField(
            controller:readText,
            decoration: const InputDecoration(hintText:"Enter the text"),
          ),
          ElevatedButton(onPressed:ConvertTTs, child: Text("Convert Text to
Speech",style:TextStyle(fontSize:20),),),
        ],
      ),
    );
  }

  void ConvertTTs ()
  {
    FlutterTts tts=FlutterTts();
    tts.setLanguage("en-IN");
    tts.speak(readText.text);
tts.setPitch(50);
  }
}
```

4. Develop an application to set an image as wallpaper. With a click of a button, the wallpaper image should start to change randomly every 30 seconds.

```
import 'dart:async';
import 'package:flutter/material.dart';
import 'package:wallpaper_manager_flutter/wallpaper_manager_flutter.dart';
import 'package:flutter_cache_manager/flutter_cache_manager.dart';

void main() {
  runApp(MyApp());
}
class MyApp extends StatelessWidget {
  MyApp({super.key});
  int _counter=0;
  Timer? timer;
  List<String>images=[

    "https://sample-videos.com/img/Sample-png-image-500kb.png",
    "https://sample-videos.com/img/Sample-png-image-3mb.png",
  ];
  @override
  Widget build(BuildContext context) {
    return MaterialApp
      (
      home: Scaffold(
        backgroundColor: Colors.white,
        appBar: AppBar(
          title: Text('Wallpaper', style: TextStyle(fontSize: 25),),
          backgroundColor: Colors.green,
        ),
        body:
        Align(
            alignment: Alignment.center,
            child:ElevatedButton(onPressed: _incrementCounter,
              child:Text("Set Home Screen Wallpaper"),)
        ),
      ),
```

```
    );
  }
  void _incrementCounter(){
    timer=Timer.periodic(
        Duration(seconds:10),
            (timer) async{
          if(_counter>=images.length){
            _counter=0;
          }
          var cachedimage=await
DefaultCacheManager().getSingleFile(images[_counter]);
          WallpaperManagerFlutter().setwallpaperfromFile(cachedimage,1);
          _counter++;
        }
    );
  }
}
```

5. Develop an application having an activity with two buttons START and STOP. On pressing the START button, the activity must start the counter by displaying the numbers from One, and the counter must keep on counting until the STOP button is pressed. Display the counter value in a TextView control.

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

void main() {
  runApp(const Counterr());
}

class Counterr extends StatelessWidget {
  const Counterr({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home:MyCounter(),
    ) ;
  }
}

class MyCounter extends StatefulWidget {
  const MyCounter({super.key});

  @override
  State<MyCounter> createState() => _MyCounterState();
}

class _MyCounterState extends State<MyCounter> {
  int counter=0;//global variable
  @override
  Widget build(BuildContext context) {

    return Scaffold(
      appBar:AppBar(
        title:Text('Counter App'),
        backgroundColor:Colors.deepOrange,
      ),
```

```
    body:Container(
      padding: const EdgeInsets.all(30),
      alignment:Alignment.center,
      child:Column(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          SizedBox(height: 50,width: 50,),
          Text("$counter",style: TextStyle(fontSize:100),),
          Row(
            mainAxisAlignment: MainAxisAlignment.spaceEvenly,
            children: [
              ElevatedButton(onPressed: startTimer, child:
Text("Start",style:TextStyle(fontSize: 30),),),
              ElevatedButton(onPressed: stopTimer, child:
Text("Stop",style:TextStyle(fontSize: 30),),),
              ElevatedButton(onPressed: resetTimer, child:
Text("Reset",style:TextStyle(fontSize: 30),),),
            ],
          )
        ],
      ),
    ),
  );
 }
 late Timer timer;//late is used for delaying

 void startTimer()
 {
  timer=Timer.periodic(Duration(milliseconds: 1000), (timer) {
    setState(() {
      counter++;
    });
  });
 }

 void stopTimer()
 {
  timer.cancel();

 }

 void resetTimer(){
```

```
      setState(() {
        counter=0;
        timer.cancel();
      });

    }

  }
```

6. Develop an activity like a phone dialer with CALL and SAVE buttons. On pressing the CALL button, it must call the phone number; pressing the SAVE button must save the number to the phone contacts.

```
import 'package:flutter/material.dart';
import
'package:flutter_phone_direct_caller/flutter_phone_direct_caller.dart';
import 'package:android_intent_plus/android_intent.dart';
import 'package:android_intent_plus/flag.dart';

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

class MyApp  extends StatelessWidget {
  const MyApp({super.key});

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home:MyCall(),
    );
  }
}

class MyCall extends StatefulWidget {
  const MyCall({super.key});

  @override
  State<MyCall> createState() => _MyCallState();
}

class _MyCallState extends State<MyCall> {
  TextEditingController phno=TextEditingController();
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home:Scaffold(
        body:Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
```

```
            TextField(
              keyboardType: TextInputType.phone,
              controller: phno,
            ),
            ElevatedButton(onPressed:()=>_callNumber(phno.text),
child:Text("Call")),
            ElevatedButton(onPressed:()=>_saveNumber(phno.text),
child:Text("Save")),
          ],
        ),
      ),
    );
  }
}

_callNumber(String phoneNumber){
  String number=phoneNumber;
  FlutterPhoneDirectCaller.callNumber(number);
}

_saveNumber(String phoneNumber) async{
  AndroidIntent intent=AndroidIntent(
      action:'action_view',
      data:'tel:$phoneNumber'
  );
  intent.launch();
}
```

7. Develop an Android application Currency Converter using Spinners.

```
import 'package:flutter/material.dart';
void main() {
  runApp(MyApp());
}

class MyApp extends StatefulWidget {


  @override
  State<MyApp> createState() => _MyAppState();
}

class _MyAppState extends State<MyApp> {
  TextEditingController editingController=TextEditingController();
  String? inputText="Rupee";
  String? outputText="USD";
  double resultvalue=0.0;
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      home:Scaffold(
        appBar:AppBar(
          title:Text("Currency Converter"),
        ),
        body:Column(
          children:[
            TextField(
              controller:editingController,
            ),
            Row(
              children:[
                Text("From: "),
                DropdownButton(items:[
                  DropdownMenuItem(child: Text("Rupee"),value:"Rupee"),
                  DropdownMenuItem(child: Text("USD"),value:"USD"),
                ], value:inputText,
                    onChanged: (String? data){
                      setState(() {
                        inputText=data;
```

```
                });
              })
          ],
        ),
        Row(
          children:[
            Text("To: "),
            DropdownButton(items:[
              DropdownMenuItem(child: Text("Rupee"),value:"Rupee"),
              DropdownMenuItem(child: Text("USD"),value:"USD"),
            ], value:outputText,
                onChanged: (String? data){
                  setState(() {
                    outputText=data;
                  });
                })

          ],
        ),
        ElevatedButton(onPressed: convert, child:Text("Convert")),
        Text('$resultvalue')
      ],
    ),
  ),
 );
}
void convert()
{
 double result=0.0;
 if(inputText=="Rupee" && outputText=="Rupee"){
  result=double.parse(editingController.text);
 }
 else if(inputText=="Rupee" && outputText=="USD")
 {
  result=double.parse(editingController.text)/81;
 }
 else if(inputText=="USD" && outputText=="USD")
 {
  result=double.parse(editingController.text);
 }
 else if(inputText=="USD" && outputText=="Rupee")
 {
```

```
      result=double.parse(editingController.text)*81;
    }
    setState(() {
      resultvalue=result;
    });
  }
}
```