**Problem Statement 1-** Write a program to create a simple Android app that takes input from the user and displays it on the screen.

**Objective-** To learn how to accept input from user and display it on the screen.

**Source Code-**

**XML Code-**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"     android:id="@+id/main"
   android:layout_width="match_parent"
android:layout_height="match_parent"     tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView”
android:text="Enter your Name"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent" />

   <EditText
      android:id="@+id/editTextText"
android:layout_width="0dp"
android:layout_height="wrap_content"
android:text="Name”
      app:layout_constraintTop_toBottomOf="@+id/textView" />

   <Button
      android:id="@+id/button"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
      android:text="Button"
      app:layout_constraintTop_toBottomOf="@+id/editTextText" />


<TextView
      android:id="@+id/textView2"
android:layout_width="wrap_content"
```

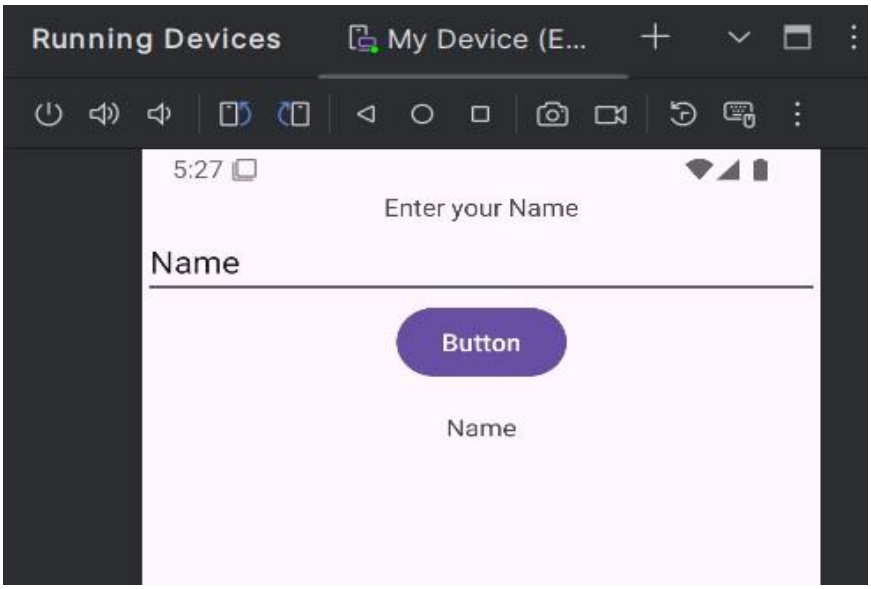
```
android:layout_height="wrap_content"
android:layout_marginTop="16dp"
      app:layout_constraintTop_toBottomOf="@+id/button" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
 package com.example.userinput;

import android.os.Bundle; import
android.view.View; import
android.widget.Button; import
android.widget.EditText;
import android.widget.TextView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets; import
androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {
   Button b;
   TextView t;
   EditText e;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
      ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      b = findViewById(R.id.button);
e = findViewById(R.id.editTextText);
t = findViewById(R.id.textView2);
      b.setOnClickListener(new View.OnClickListener() {
@Override
```

```
        public void onClick(View view) {
String str = e.getText().toString();
t.setText(str);
        }
      });
  } }
```

**Output-**




**Problem Statement 2-** Write a program to print on screen whether a number given by the user is prime or not.

**Objective-** To check whelter the number taken from user is a prime number or not.

**Source Code-**

**XML Code-**

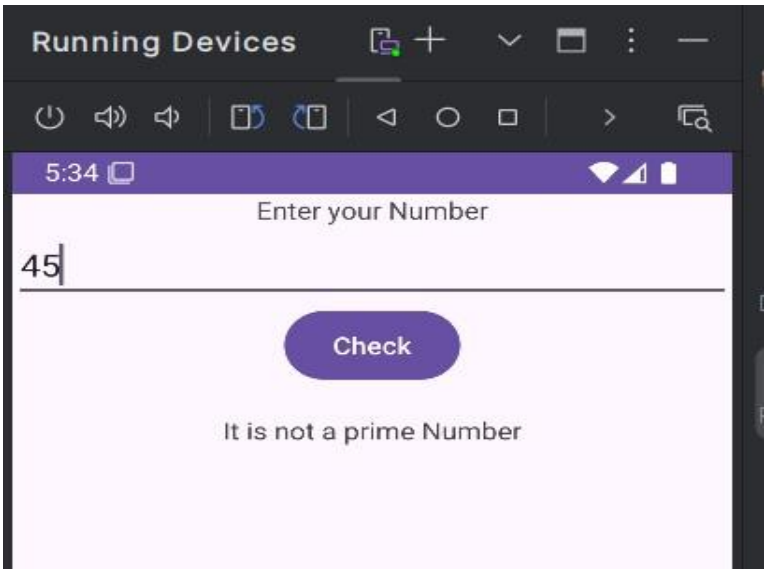
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"     android:id="@+id/main"
   android:layout_width="match_parent"
android:layout_height="match_parent"     tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:text="Enter your Number"
      app:layout_constraintTop_toTopOf="parent"/>

   <EditText
      android:id="@+id/editTextText"
android:inputType="text"
      app:layout_constraintTop_toBottomOf="@+id/textView" />

   <Button
      android:id="@+id/button"
android:text="Check"
      app:layout_constraintTop_toBottomOf="@+id/editTextText" />

   <TextView
      android:id="@+id/textView2/”
android:layout_marginTop="16dp"
      android:text="TextView”
      app:layout_constraintTop_toBottomOf="@+id/button" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.prime_no;

import …

public class MainActivity extends AppCompatActivity {
   Button b;
   TextView t;
```

```
   EditText e;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
t=findViewById(R.id.textView2);
e=findViewById(R.id.editTextText);       b=findViewById(R.id.button);
      b.setOnClickListener(new View.OnClickListener() {


         @Override
         public void onClick(View view) {              int
num=Integer.parseInt(e.getText().toString());              int
flag=0;              String str;
            for (int i = 2; i <= num / 2; ++i) {
if (num % i == 0) {                    flag=1;
break;
               }
            }
            if(flag==1){
               str="It is not a prime Number";
t.setText(str);              }
            else{
               str="It is a prime Number";
t.setText(str);
            }
         }
      });

   }
}
```

**Output-**




**Problem Statement 3-** Write a program to print the input given by the user in uppercase.

**Objective-** To convert the Lowercase String to Uppercase String.

**Source Code-**

**XML Code-**

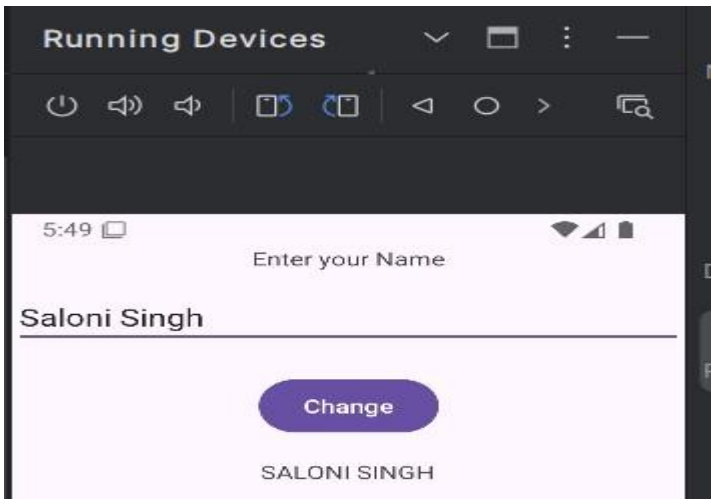
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"     android:layout_width="match_parent"
android:layout_height="match_parent"
   tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:text="Enter your Name"
      app:layout_constraintTop_toTopOf="parent" />

   <EditText
      android:id="@+id/editTextText”
android:text="Name"
      app:layout_constraintTop_toBottomOf="@+id/textView" />

   <Button
      android:id="@+id/button"
android:text="Change"
      app:layout_constraintTop_toBottomOf="@+id/editTextText" />

   <TextView
      android:id="@+id/textView2"
android:text="TextView"
      app:layout_constraintTop_toBottomOf="@+id/button" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.uppercase; import .. public
class MainActivity extends AppCompatActivity {
   Button b;
   TextView t;
   EditText e;

   @Override
```

```
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
      ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      b=findViewById(R.id.button);
e=findViewById(R.id.editTextText);
t=findViewById(R.id.textView2);        b.setOnClickListener(view->()
(
            String str=e.getText().toString().toUpperCase();
t.setText(str);
      });
   } }
```

**Output-**




**Problem Statement 4-** Write a program to find the total number of vowels, consonants, and characters in a given string.

**Objective-** To take a string as input from the user and calculates the total number of vowels, consonants, and characters in the given string.

**Source Code-**

**XML Code-**

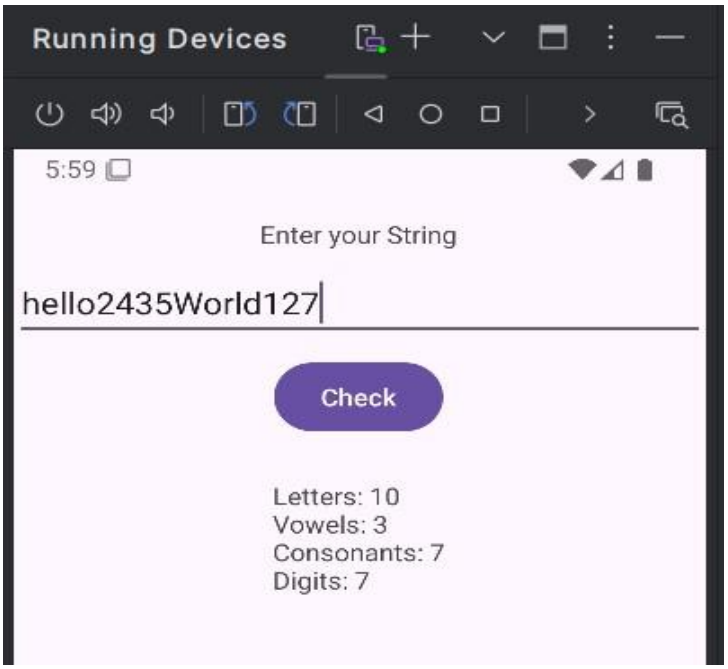
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"     android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:text="Enter your String"
      app:layout_constraintTop_toTopOf="parent" />

   <EditText
      android:id="@+id/editTextText"
      app:layout_constraintTop_toBottomOf="@+id/textView" />


   <Button
      android:id="@+id/button"
android:text="Check"
      app:layout_constraintTop_toBottomOf="@+id/editTextText" />

   <TextView
      android:id="@+id/textView2"
      app:layout_constraintTop_toBottomOf="@+id/button" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.count;

import …

public class MainActivity extends AppCompatActivity {
   TextView t;
   EditText e;
```

```
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
      ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      t=findViewById(R.id.textView2);
e=findViewById(R.id.editTextText);
      findViewById(R.id.button).setOnClickListener(v -> {
String input = e.getText().toString();
         int vowels = 0, consonants = 0, digits = 0, letter = 0;
for (char c : input.toCharArray()) {              if
(!Character.isDigit(c)) {
               if ("aeiou".indexOf(c) != -1 || "AEIOU".indexOf(c) != -1) {
vowels++;                  } else {
                  consonants++;
               }
               letter++;
} else {
digits++;
            }
         }
         String result = "Letters: " + letter +"\nVowels: " + vowels +"\nConsonants: " + consonants+
               "\nDigits: " + digits ;
t.setText(result);

      });
  }
}
```

**Output-**


Running Devices
5:59
Enter your String
hello2435World127
Check
Letters: 10
Vowels: 3
Consonants: 7
Digits: 7

**Problem Statement**

**5-** Write a program to change the background color of a TextView in an Android app.

**Objective-** To learn the use of setBackgroundColor() method.

**Source Code-**

**XML Code-**

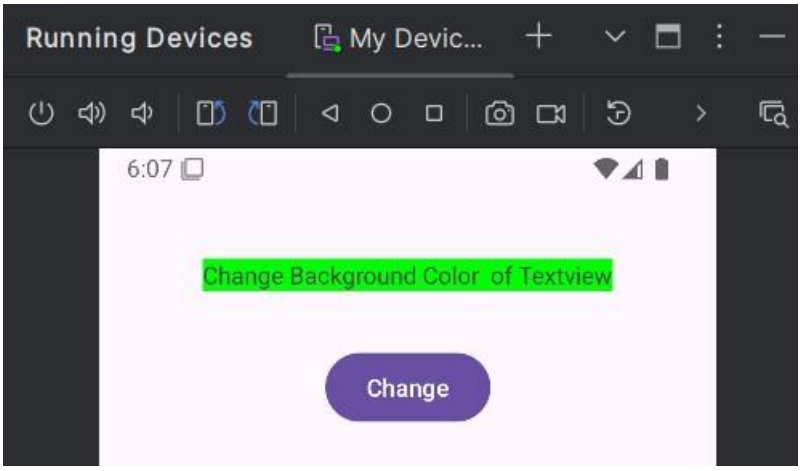
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"     android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="40dp"
      android:text="Change Background Color  of Textview"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

   <Button
      android:id="@+id/button"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="32dp"
      android:text="Change"
      app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.a5;
```

```
import ..

public class MainActivity extends AppCompatActivity {
   Button b;
   TextView t;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
      ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      b=findViewById(R.id.button);
t=findViewById(R.id.textView);
      b.setOnClickListener(new View.OnClickListener() {


         @Override
         public void onClick(View view) {
            t.setBackgroundColor(Color.GREEN);
         }
      });
   } }
```

**Output-**




**6**- Write a program to Set Background Image in Android.

**Problem Statement**

**Objective-** To learn the implementation of setBackgroundResource() method.

**Source Code-**

**XML Code-**

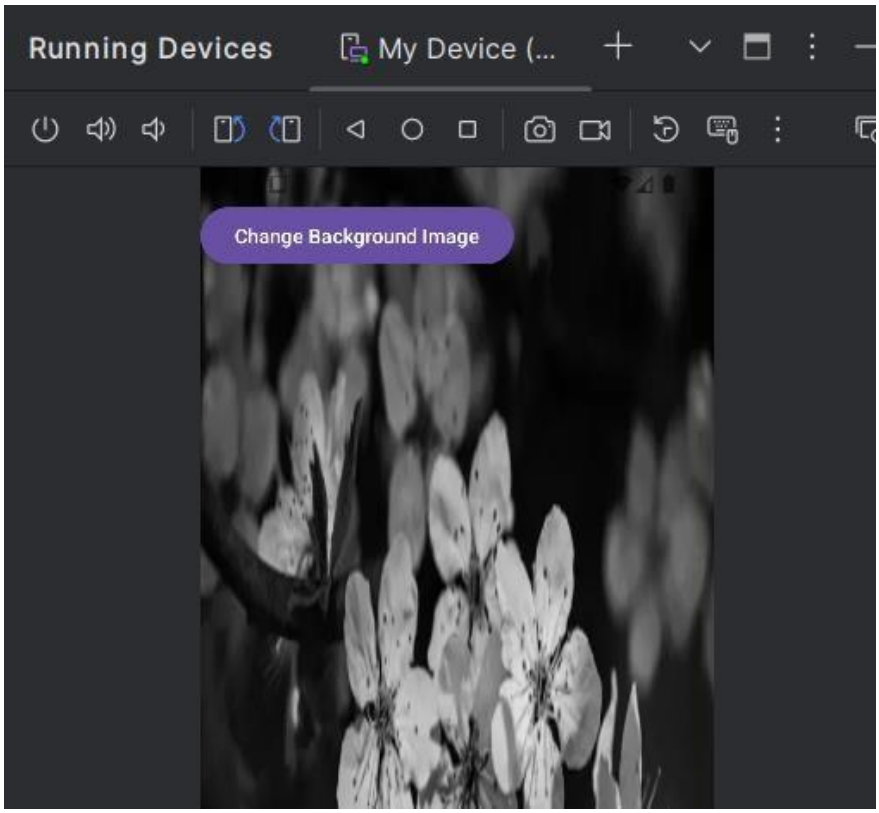
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"     android:layout_width="match_parent"
android:layout_height="match_parent"
   tools:context=".MainActivity">

   <Button
      android:id="@+id/button"
android:layout_width="wrap_content"
android:layout_height="wrap_content"        android:text="Change
Background Image"
app:layout_constraintTop_toTopOf="parent" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.a6;

import ..

public class MainActivity extends AppCompatActivity {
   ConstraintLayout c;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
```

```
    c=findViewById(R.id.main);
    findViewById(R.id.button).setOnClickListener(new View.OnClickListener() {


        @Override
        public void onClick(View view) {
            c.setBackgroundResource(R.drawable.img);
        }
    });

} }
```

**Output-**




**7-** Write a program to change the background color of a Component view in an Android app.

**Objective-** To learn the implementation of setBackgroundColor() method in Component view.

**Problem Statement**

**Source Code-**

**XML Code-**

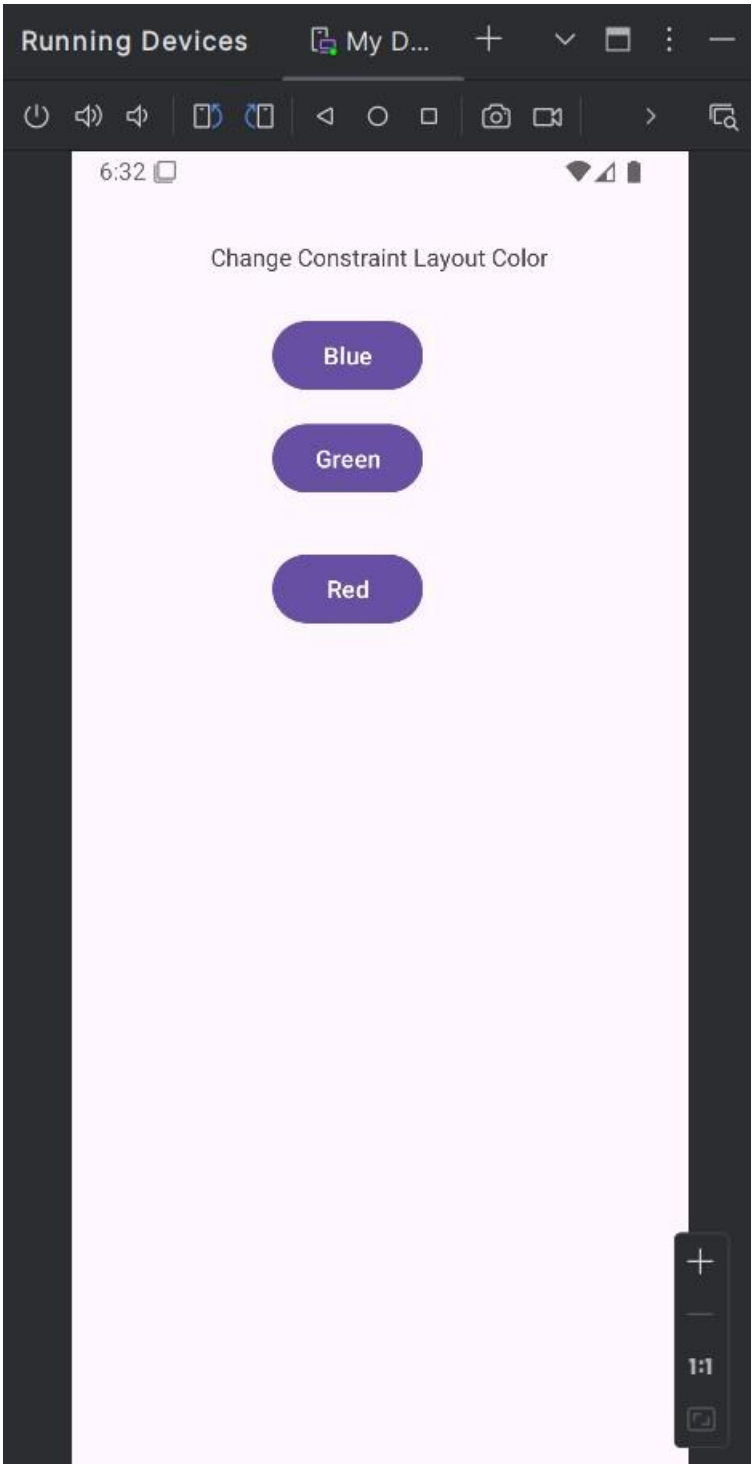
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"     android:id="@+id/main"
   android:layout_width="match_parent"
android:layout_height="match_parent"     tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:text="Change Constraint Layout Color"
app:layout_constraintTop_toTopOf="parent" />

   <Button
      android:id="@+id/button"
android:text="Blue"
      app:layout_constraintTop_toBottomOf="@+id/textView" />

   <Button
      android:id="@+id/button2"
android:text="Green"
      app:layout_constraintTop_toBottomOf="@+id/button" />

   <Button
      android:id="@+id/button3"
android:text="Red"
      app:layout_constraintTop_toBottomOf="@+id/button2" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.layoutcolour;

import ..

public class MainActivity extends AppCompatActivity {
   ConstraintLayout c;
   Button b1,b2,b3;
```

```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
        b1=findViewById(R.id.button);
b2=findViewById(R.id.button2);
b3=findViewById(R.id.button3);
c=findViewById(R.id.main);


        b1.setOnClickListener(view -> {
            c.setBackgroundColor(Color.BLUE);
        });


        b2.setOnClickListener(view -> {
            c.setBackgroundColor(Color.GREEN);
        });


        b3.setOnClickListener(view -> {
            c.setBackgroundColor(Color.RED);
        });
    } }
```

**Output-**




**Problem Statement 8 -** Write a program to change the text color of a textview in an Android app.

**Objective-** To learn the implementation of setTextColor() method in a TextView.

**Source Code-**

**XML Code-**

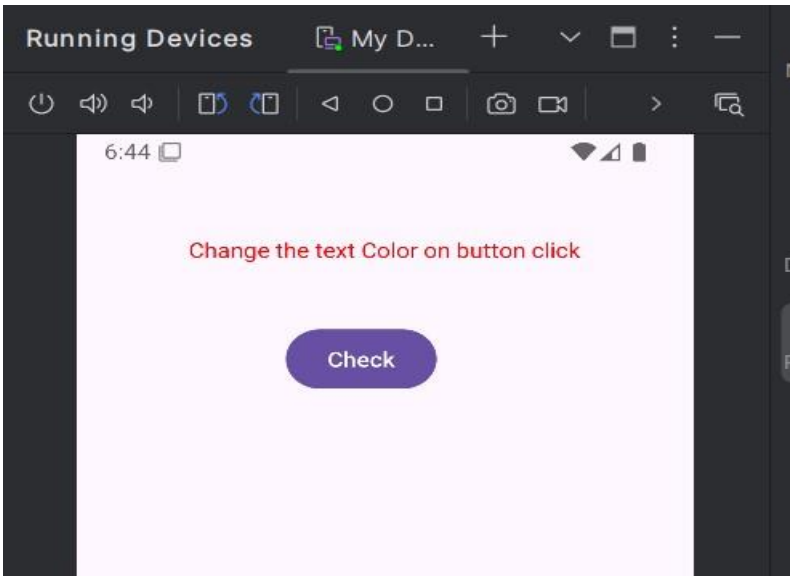
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"     android:id="@+id/main"
   android:layout_width="match_parent"
android:layout_height="match_parent"
   tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="44dp"
      android:text="Change the text Color on button click"
app:layout_constraintEnd_toEndOf="parent"        app:layout_constraintHorizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

   <Button
      android:id="@+id/button"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="40dp"
      android:text="Check"
      app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.448"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/textView" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.textviewcolor;

import …
```

```
public class MainActivity extends AppCompatActivity {
   TextView t;
   Button b;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
      ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      t=findViewById(R.id.textView);
b=findViewById(R.id.button);
      b.setOnClickListener(view -> {
         t.setTextColor(Color.RED);
      });
   } }
```

**Output-**




**Problem Statement 9-** Write a program to create a basic calculator in order to perform basic 4 arithmetic operations i.e addition , division , multiplication & subtraction .

**Objective-** To create a basic calculator to perform addition ,subtraction ,multiplication ,division.

**Source Code-**

**XML Code-**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"     android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView"
android:layout_marginTop="36dp"        android:text="Enter
1st Number"
      app:layout_constraintTop_toTopOf="parent" />

   <EditText
      android:id="@+id/editTextText"
      app:layout_constraintTop_toBottomOf="@+id/textView" />


   <TextView
      android:id="@+id/textView2"
android:text="Enter 2nd Number"
      app:layout_constraintTop_toBottomOf="@+id/editTextText" />

   <EditText
      android:id="@+id/editTextText2"
      app:layout_constraintTop_toBottomOf="@+id/textView2" />

   <Button
      android:id="@+id/button"
android:text="Addition"
      app:layout_constraintTop_toBottomOf="@+id/editTextText2" />

   <Button
      android:id="@+id/button2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="56dp"        android:text="Subtraction"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.823"
app:layout_constraintStart_toStartOf="parent"
```

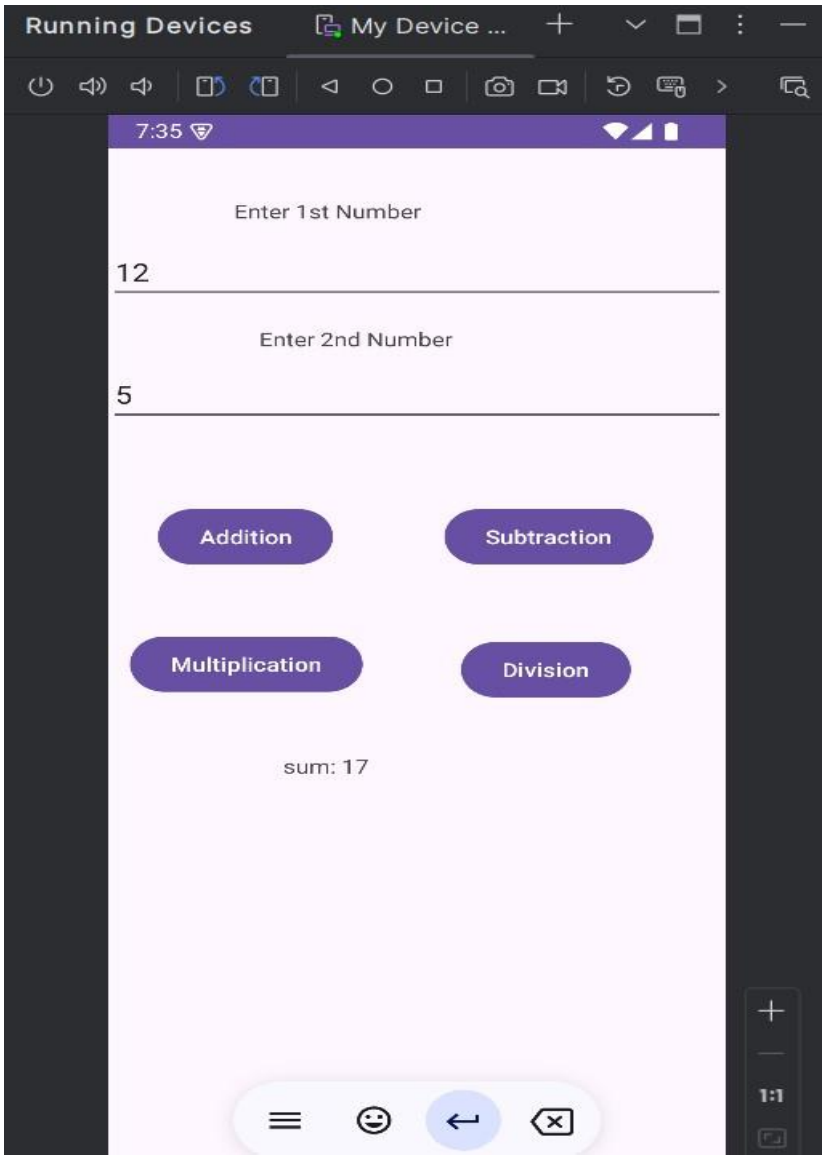
```
      app:layout_constraintTop_toBottomOf="@+id/editTextText2" />

   <Button
      android:id="@+id/button3"
android:text="Multiplication"
      app:layout_constraintTop_toBottomOf="@+id/button" />

   <Button
      android:id="@+id/button4"
android:text="Division"
      app:layout_constraintTop_toBottomOf="@+id/button2" />

   <TextView
      android:id="@+id/textView3"
android:text="Result"
      app:layout_constraintTop_toBottomOf="@+id/button4" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

Java Code-

```
package com.example.a9;

import …

public class MainActivity extends AppCompatActivity {
   Button b1,b2,b3,b4;
   EditText e1,e2;
   TextView t;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);        setContentView(R.layout.activity_main);
b1=findViewById(R.id.button);        b2=findViewById(R.id.button2);
b3=findViewById(R.id.button3);        b4=findViewById(R.id.button4);
e1=findViewById(R.id.editTextText);        e2=findViewById(R.id.editTextText2);
t=findViewById(R.id.textView3);        b1.setOnClickListener(view -> {
          int num = Integer.parseInt(e1.getText().toString());
int num1 = Integer.parseInt(e2.getText().toString());
t.setText("sum: "+String.valueOf(num+num1));
      });

      b2.setOnClickListener(view -> {
```

```
        int num = Integer.parseInt(e1.getText().toString());
int num1 = Integer.parseInt(e2.getText().toString());
        t.setText("Difference: "+String.valueOf(num-num1));
      });

      b3.setOnClickListener(view -> {
        int num = Integer.parseInt(e1.getText().toString());
int num1 = Integer.parseInt(e2.getText().toString());
        t.setText("Multiplication: "+String.valueOf(num*num1));
      });

      b4.setOnClickListener(view -> {
        int num = Integer.parseInt(e1.getText().toString());
int num1 = Integer.parseInt(e2.getText().toString());          if
(num1 != 0) {
          t.setText("Division: "+String.valueOf(num/num1));
        } else {
          String str="Not divisible by Zero";
t.setText(str);
        }
      });
  } }
```

**Out**
**put-**




**Problem Statement 10-** Write a program to perform simple validation on name and age.

**Objective-** To learn about the implementation of setError() method and use of expression(^[A-Zaz_]+$).

**Source Code-**

**XML Code-**

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"     android:id="@+id/main"
   android:layout_width="match_parent"
android:layout_height="match_parent"     tools:context=".MainActivity">

   <TextView
      android:id="@+id/textView""
android:text="Enter your Name"
      app:layout_constraintTop_toTopOf="parent" />

   <EditText
      android:id="@+id/editTextText"
      app:layout_constraintTop_toBottomOf="@+id/textView" />

   <TextView
      android:id="@+id/textView2"
android:text="Enter your Age"
      app:layout_constraintTop_toBottomOf="@+id/editTextText" />

   <EditText
      android:id="@+id/editTextText2"
      app:layout_constraintTop_toBottomOf="@+id/textView2" />

   <Button
      android:id="@+id/button"
android:text="Validate"
      app:layout_constraintTop_toBottomOf="@+id/editTextText2" />


<TextView
      android:id="@+id/textView3"
android:text="TextView"
      app:layout_constraintTop_toBottomOf="@+id/button" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

**Java Code-**

```
package com.example.validation;

import …


public class MainActivity extends AppCompatActivity {
   EditText e1,e2;
   Button b;
   TextView t;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
EdgeToEdge.enable(this);
      setContentView(R.layout.activity_main);
      ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
         Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
         v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
         return insets;
      });
      t=findViewById(R.id.textView3);
e1=findViewById(R.id.editTextText);
e2=findViewById(R.id.editTextText2);        b=findViewById(R.id.button);
      b.setOnClickListener(view -> {
String name=e1.getText().toString();
String age=e2.getText().toString();
if(name.isEmpty()){
            e1.setError("Field should not be empty");
         }
         else if(age.isEmpty()){
            e2.setError("Field should not be empty");
         }

         else if(!age.isEmpty()){
int num=Integer.parseInt(age);
if(num<1||num>100){
               e2.setError("Invalid age");
            }
         }
         else if(!name.isEmpty()){              if(!name.matches("^[A-
Za-z_]+$")){
               e1.setError("Invalid name");
            }
         }
```

```
            String s = "Validation Successful";
t.setText(s);

      });
   } }
```

**Output-**