

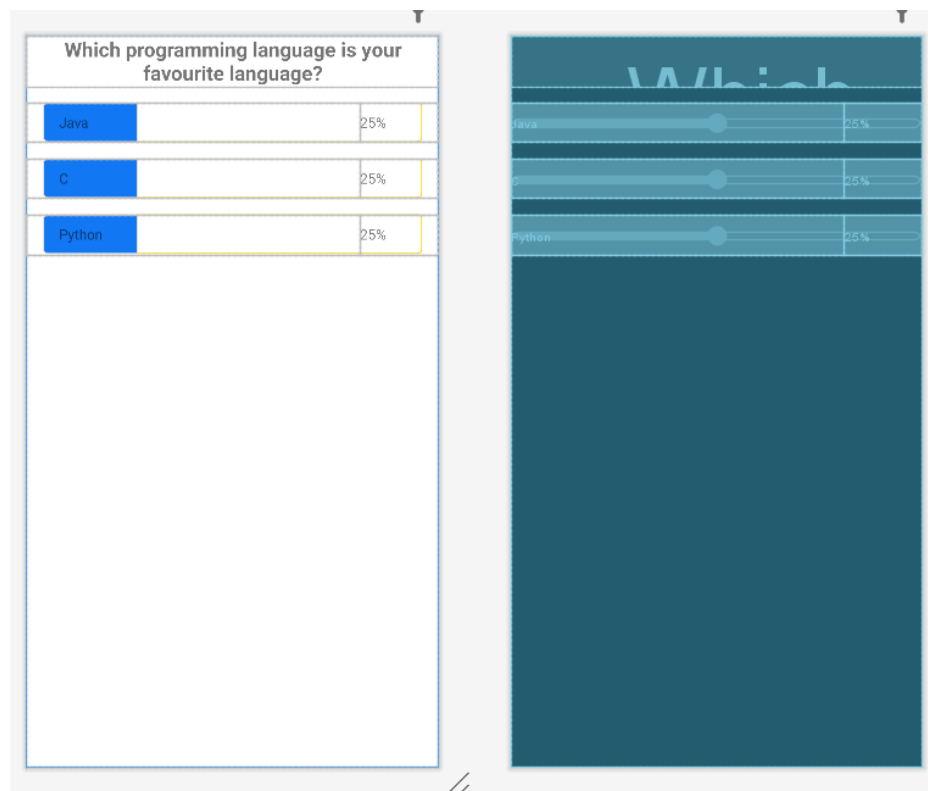
Date: 17/03/2022  
Lab Session No.: 05

**Aim:**

Develop an android application that prompts the user to cast the poll

**Software's /IDE Tools:**

Android Development Kit / Android Studio

**Application User interface design:****Application Programming Interface:**

| API / PACKAGES             | CLASSES / INTERFACES | METHODS  | DESCRIPTION  |
|----------------------------|----------------------|--|--|
| import androidx.appcompat. | AppCompatActivity    | protected void onCreate(Bundle savedInstanceState) | onCreate(Bundle) is where you initialize your activity. When Activity is started and application is not loaded, then both onCreate() methods will be called. |

|                                 |          |           |  |
|---------------------------------|----------|-----------|--|
| app.AppCompatActivity;          |          |           |  |
| import android.widget.EditText; | EditText | getText() | Determines the minimum type that getText() will return. If set, specifies that this TextView has a textual input method and should automatically capitalize what the user types. |

**Code/Implementation:**

// Develop an android application to demonstrate the Implicit and Explicit Intent.

// Project Name : ShareMyApp

/\*

|                    |  |
|--------------------|--|
| Lab Session No.    | : 05   |
| Author             | : Tellakula Avinash                                      |
| Date               | : 17/03/2022   |
| Roll Number        | : 198W1A05C0   |
| Description        | : Implementation of Constraint Layout                    |
| Softwares required | : Android Studio   |
| Topics Covered     | : Constraint Layout, TextView, EditText, Button, Seekbar |

\*/

**MainActivity.java**

```
package com.avinash.pollstatus1;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.MotionEvent;
import android.view.View;
import android.widget.SeekBar;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    SeekBar seekbar1, seekbar2, seekbar3;
    TextView tvOption1, tvOption2, tvOption3;
    TextView tvPercent1, tvPercent2, tvPercent3;
    int counter1 = 1, counter2 = 1, counter3 = 1;
    boolean flag1 = true, flag2 = true, flag3 = true;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        seekbar1 = findViewById(R.id.seek_bar1);
        seekbar2 = findViewById(R.id.seek_bar2);
        seekbar3 = findViewById(R.id.seek_bar3);
        tvOption1 = findViewById(R.id.tv_option1);
```

```

tvOption2 = findViewById(R.id.tv_option2);
tvOption3 = findViewById(R.id.tv_option3);
tvPercent1 = findViewById(R.id.tv_percent1);
tvPercent2 = findViewById(R.id.tv_percent2);
tvPercent3 = findViewById(R.id.tv_percent3);

seekbar1.setOnTouchListener(new View.OnTouchListener() {
    @Override
    public boolean onTouch(View view, MotionEvent motionEvent) {
        return true;
    }
});
seekbar2.setOnTouchListener(new View.OnTouchListener() {
    @Override
    public boolean onTouch(View view, MotionEvent motionEvent) {
        return true;
    }
});
seekbar3.setOnTouchListener(new View.OnTouchListener() {
    @Override
    public boolean onTouch(View view, MotionEvent motionEvent) {
        return true;
    }
});

tvOption1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        if (flag1) {
            counter1=counter1+1;
            counter2 = 1;
            counter3 = 1;
            flag1 = false;
            flag2 = true;
            flag3 = true;
            calcpercent();
        }
    }
});
tvOption2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        if (flag2) {
            counter1=1;
            counter2++;
            counter3 = 1;
            flag1 = true;
            flag2 = false;
            flag3 = true;
            calcpercent();
        }
    }
});
tvOption3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        if (flag3) {

```

```

        counter1=1;
        counter2 = 1;
        counter3++;
        flag1 = true;
        flag2 = true;
        flag3 = false;
        calcpercent();
    }
}

});

}

private void calcpercent() {
    double total = counter1 + counter2 + counter3;
    System.out.println(total);
    double percent1 = (counter1 / total) * 100;
    double percent2 = (counter2 / total) * 100;
    double percent3 = (counter3 / total) * 100;

    tvPercent1.setText(String.format("%.0f%%", percent1));
    seekbar1.setProgress((int) percent1);
    tvPercent2.setText(String.format("%.0f%%", percent2));
    seekbar2.setProgress((int) percent2);
    tvPercent3.setText(String.format("%.0f%%", percent3));
    seekbar3.setProgress((int) percent3);
}
}

```

activity\_main.xml

```

<?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:layout_width="match_parent"
android:layout_height="match_parent"
android:layout_gravity="center"
tools:context=".MainActivity">

<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/tv_question"
    android:text="Which programming language is your favourite language?"
    android:textSize="20sp"
    android:textStyle="bold"
    android:textAlignment="center"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintEnd_toStartOf="parent"
    tools:ignore="HardcodedText" />
<SeekBar
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/seek_bar1"
    android:max="100"

```

```

        android:progress="25"
        android:layout_marginTop="16dp"
        android:thumb="@android:color/transparent"
        android:progressDrawable="@drawable/progress_track"
        app:layout_constraintTop_toBottomOf="@+id/tv_question"
        app:layout_constraintStart_toStartOf="parent"
        tools:ignore="MissingConstraints"
    />

    <TextView
        android:layout_width="0dp"
        android:layout_height="40dp"
        android:id="@+id/tv_option1"
        android:text="Java"
        android:paddingStart="32dp"
        android:paddingEnd="0dp"
        android:layout_marginTop="16dp"
        android:gravity="center_vertical"
        app:layout_constraintTop_toBottomOf="@+id/tv_question"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/tv_percent1"
        tools:ignore="HardcodedText" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="40dp"
        android:id="@+id/tv_percent1"
        android:text="25%"
        android:paddingStart="0dp"
        android:paddingEnd="52dp"
        android:layout_marginTop="16dp"
        android:gravity="center_vertical"
        app:layout_constraintTop_toBottomOf="@+id/tv_question"
        app:layout_constraintEnd_toEndOf="parent"
        tools:ignore="HardcodedText" />

    <SeekBar
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/seek_bar2"
        android:max="100"
        android:progress="25"
        android:layout_marginTop="16dp"
        android:thumb="@android:color/transparent"
        android:progressDrawable="@drawable/progress_track"
        app:layout_constraintTop_toBottomOf="@+id/seek_bar1"
        app:layout_constraintStart_toStartOf="parent"
        tools:ignore="MissingConstraints"
    />

    <TextView
        android:layout_width="0dp"
        android:layout_height="40dp"
        android:id="@+id/tv_option2"
        android:text="C"
        android:paddingStart="32dp"
        android:paddingEnd="0dp"
        android:layout_marginTop="16dp"
        android:gravity="center_vertical"
        app:layout_constraintTop_toBottomOf="@+id/seek_bar1"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toStartOf="@+id/tv_percent2"

```

```

        tools:ignore="HardcodedText" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="40dp"
    android:id="@+id/tv_percent2"
    android:text="25%"
    android:paddingStart="0dp"
    android:paddingEnd="52dp"
    android:layout_marginTop="16dp"
    android:gravity="center_vertical"
    app:layout_constraintTop_toBottomOf="@+id/seek_bar1"
    app:layout_constraintEnd_toEndOf="parent"
    tools:ignore="HardcodedText" />
<SeekBar
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/seek_bar3"
    android:max="100"
    android:progress="25"
    android:layout_marginTop="16dp"
    android:thumb="@android:color/transparent"
    android:progressDrawable="@drawable/progress_track"
    app:layout_constraintTop_toBottomOf="@+id/seek_bar2"
    app:layout_constraintStart_toStartOf="parent"
    tools:ignore="MissingConstraints"
/>
<TextView
    android:layout_width="0dp"
    android:layout_height="40dp"
    android:id="@+id/tv_option3"
    android:text="Python"
    android:paddingStart="32dp"
    android:paddingEnd="0dp"
    android:layout_marginTop="16dp"
    android:gravity="center_vertical"
    app:layout_constraintTop_toBottomOf="@+id/seek_bar2"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/tv_percent3"
    tools:ignore="HardcodedText" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="40dp"
    android:id="@+id/tv_percent3"
    android:text="25%"
    android:paddingStart="0dp"
    android:paddingEnd="52dp"
    android:layout_marginTop="16dp"
    android:gravity="center_vertical"
    app:layout_constraintTop_toBottomOf="@+id/seek_bar2"
    app:layout_constraintEnd_toEndOf="parent"
    tools:ignore="HardcodedText" />
</androidx.constraintlayout.widget.ConstraintLayout>

```

### progress track.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<layer-list xmlns:android="http://schemas.android.com/apk/res/android">
    <item>
        <shape android:shape="rectangle">

```

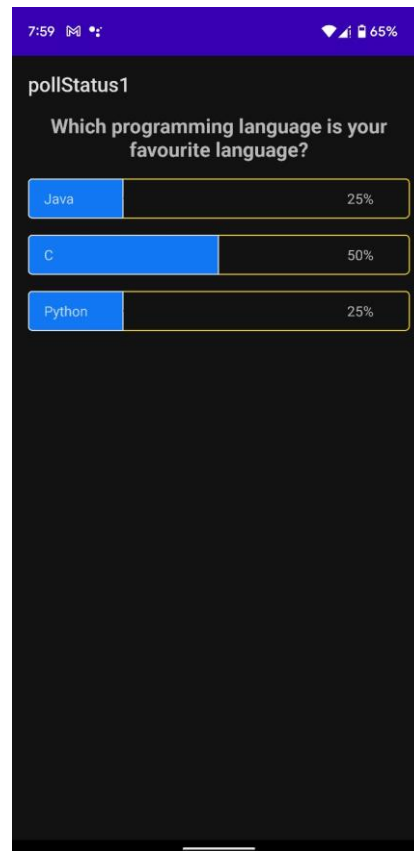
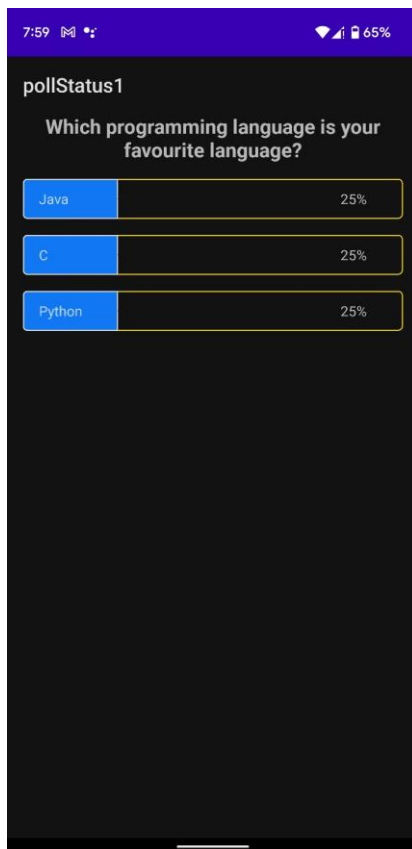
```

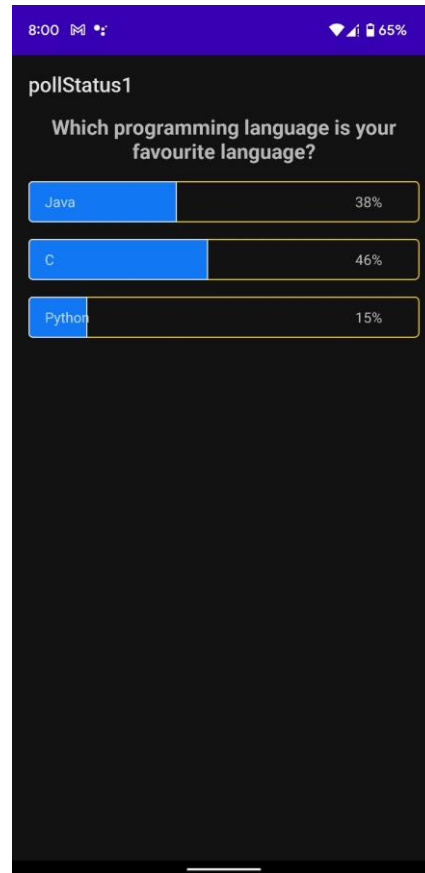
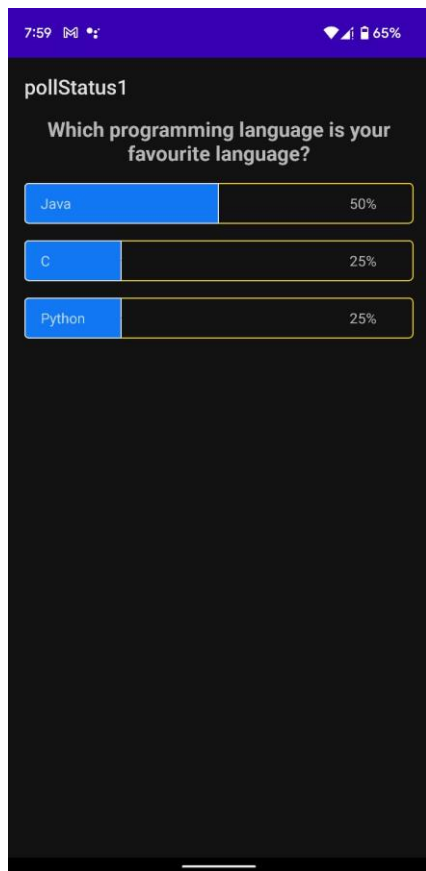
        <solid android:color="@android:color/transparent"/>
        <size android:height="40dp"/>
        <corners android:radius="4dp"/>
        <stroke android:color="#F3D304" android:width="1dp"/>

    </shape>
</item>
<item>
    <scale android:scaleWidth="100%">
        <selector>
            <item android:state_enabled="false"
android:drawable="@android:color/transparent"/>
            <item>
                <shape android:shape="rectangle">
                    <solid android:color="#67F311"/>
                    <size android:height="40dp"/>
                    <corners android:bottomLeftRadius="4dp"
                        android:topLeftRadius="4dp"/>
                    <stroke android:color="#E0E0E0" android:width="1dp"/>
                </shape>
            </item>
        </selector>
    </scale>
</item>
</layer-list>

```

## Output:



**Result:**

Developing an android application that prompts the user to cast the poll is executed Successfully.