

Practical No 22

1. Write a program to changes the background color when device is shuffled.

Code for activity_main.xml location layout folder

```
<?xml version="1.0" encoding="utf 8"?>
<LinearLayout
    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"
    tools:context=".MainActivity"
    android:orientation="vertical">
    <TextView
        android:id="@+id/ssensorsList"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="80dp"
        android:text="Sensors"
        android:textSize="20dp"
        android:textStyle="bold"
        android:layout_gravity="center"/>
</LinearLayout>
```

Code for MainActivity.java file location java folder

```
public class MainActivity extends AppCompatActivity {
    private SensorManager sm;
    private TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        sm =
(SensorManager) getSystemService(Context.SENSOR_SERVICE);
        tv = (TextView) findViewById(R.id.ssensorsList);
        List<Sensor> slist = sm.getSensorList(Sensor.TYPE_ALL);
        StringBuilder sb = new StringBuilder();
        for(Sensor s: slist){
            sb.append(s.getName()+"\n");
        }
        tv.setText(sb);
    }
}
```

