

Practical No 4

1. Write a Program to Display HelloWorld.

Activity_main.xml file:

```
<?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"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

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

MainActivity.java file:

```
package com.example.hellow;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

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

AndroidManifest.xml file:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
```

```

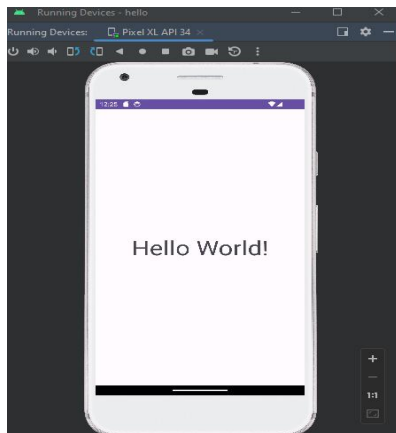
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Hellow"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>

```

O/P:-



2. Write a Program to Display Student Name and Marks.

Activity_main.xml file:

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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">

    <TextView

```

```

        android:layout_width="wrap_content"
        android:id="@+id/t1"
        android:layout_marginVertical="20dp"
        android:layout_height="wrap_content"
        android:text="Student Name:Jadhav Sakshi Mansing"
        android:textSize="20dp" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Marks:94%"
    android:layout_below="@+id/t1"
    android:textSize="20dp" />

```

MainActivity.java file:

```

package com.example.hello;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

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

```

AndroidManifest.xml file:

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Hello"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

```

```
        </intent-filter>
    </activity>
</application>

</manifest>
```

O/P:-



Practical No 5

Exercise

1. Write a Program to Place Name, age, and mobile number linearly on the display screen using linear layout.

Activity_main.xml file:-

```
<?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"
    android:orientation="vertical"
    android:background="#00ffff"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:id="@+id/t1"
        android:layout_marginVertical="20dp"
        android:layout_height="wrap_content"
        android:text="Student Name:Jadhav Sakshi Mansing"
        android:textSize="20dp" />

    <TextView
        android:layout_width="70dp"
        android:layout_height="50dp"
        android:layout_marginVertical="20dp"
        android:text="Age:19"
        android:textSize="20dp"/>

    <TextView
        android:layout_width="wrap_content"
        android:id="@+id/t2"
        android:layout_marginVertical="20dp"
        android:layout_height="wrap_content"
        android:text="Mobile No:8999187200"
        android:textSize="20dp" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Submit"
        android:layout_x="400px"
        android:layout_y="700px"
    ></Button>
</LinearLayout>
```

MainActivity.java file:

```
package com.example.hello;

import androidx.appcompat.app.AppCompatActivity;
```

```
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

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

AndroidManifest.xml file:

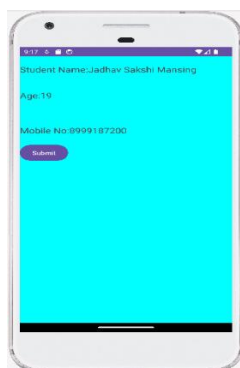
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.LinearLayout"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

O/P:-



2. Write a Program to Place Name ,age ,and mobile number linearly on the display screen using Absolute layout.

Activity_main.xml file:-

```
<?xml version="1.0" encoding="utf-8"?>
<AbsoluteLayout 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="fill_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:background="#ffc0cb"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:id="@+id/t1"
        android:layout_marginVertical="20dp"
        android:layout_height="wrap_content"
        android:text="Student Name:Jadhav Sakshi Mansing"
        android:textSize="20dp"
        android:layout_x="50px"
        android:layout_y="100px"/>

    <TextView
        android:layout_width="70dp"
        android:layout_height="50dp"
        android:layout_marginVertical="20dp"
        android:text="Age:19"
        android:layout_x="70px"
        android:layout_y="180px"
        android:textSize="20dp"/>

    <TextView
        android:layout_width="wrap_content"
        android:id="@+id/t2"
        android:layout_marginVertical="20dp"
        android:layout_height="wrap_content"
        android:text="Mobile No:8999187200"
        android:textSize="20dp"
        android:layout_x="100px"
        android:layout_y="300px"/>

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Submit"
        android:layout_x="400px"
        android:layout_y="700px"
    ></Button>

</AbsoluteLayout>
```

MainActivity.java file:

```
package com.example.hello;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
```

```
public class MainActivity extends AppCompatActivity {
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
    }
```

```
}
```

AndroidManifest.xml file:

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
```

```
    xmlns:tools="http://schemas.android.com/tools">
```

```
    <application
```

```
        android:allowBackup="true"
```

```
        android:dataExtractionRules="@xml/data_extraction_rules"
```

```
        android:fullBackupContent="@xml/backup_rules"
```

```
        android:icon="@mipmap/ic_launcher"
```

```
        android:label="@string/app_name"
```

```
        android:roundIcon="@mipmap/ic_launcher_round"
```

```
        android:supportsRtl="true"
```

```
        android:theme="@style/Theme.Absulate"
```

```
        tools:targetApi="31">
```

```
        <activity
```

```
            android:name=".MainActivity"
```

```
            android:exported="true">
```

```
            <intent-filter>
```

```
                <action android:name="android.intent.action.MAIN" />
```

```
                <category android:name="android.intent.category.LAUNCHER" />
```

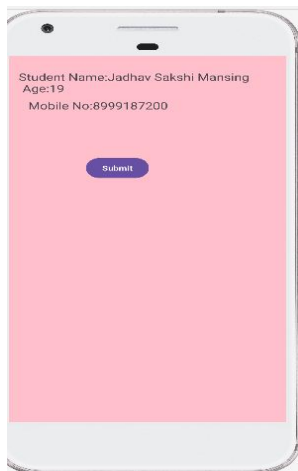
```
            </intent-filter>
```

```
        </activity>
```

```
    </application>
```

```
</manifest>
```

O/P:-



Practical No 6

Exercise:

1. Write a Program to display 10 students basic information in a table form using Table Layout.

Activity_main.xml file:-

```
<?xml version="1.0" encoding="utf-8"?>
<TableLayout 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">
    <TableRow android:background="#ef48d2" android:padding="5px" >

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Student Information"
            android:textColor="#161d6f"
            android:textSize="30dp"
            android:textStyle="bold" />
    </TableRow>

    <TableRow android:background="#c7ffd8" android:padding="5px" >

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Name:Sakshi Marks:87.33%"
            android:textColor="#161d6f"
            android:textSize="30dp"
            android:textStyle="bold"
            />
    </TableRow>
    <TableRow android:background="#98ded9" android:padding="5px" >

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Name:Shravani Marks:88%"
            android:textColor="#161d6f"
            android:textSize="30dp"
            android:textStyle="bold"
            />
    </TableRow>

    <TableRow android:background="#c7ffd8" android:padding="5px" >
```

```

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Name:Rupali  Marks:87%"
            android:textColor="#161d6f"
            android:textSize="30dp"
            android:textStyle="bold"
        />
    </TableRow>
    <TableRow android:background="#98ded9" android:padding="5px" >

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Name:Isha  Marks:56.40%"
            android:textColor="#161d6f"
            android:textSize="30dp"
            android:textStyle="bold"
        />
    </TableRow>

    <TableRow android:background="#c7ffd8" android:padding="5px" >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Name:Supriya  Marks:80.33%"
        android:textColor="#161d6f"
        android:textSize="30dp"
        android:textStyle="bold"
    />
    </TableRow>
    <TableRow android:background="#98ded9" android:padding="5px" >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Name:pooja  Marks:88%"
        android:textColor="#161d6f"
        android:textSize="30dp"
        android:textStyle="bold"/>
    </TableRow>
    <TableRow android:background="#c7ffd8" android:padding="5px" >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Name:Swati  Marks:78.76%"
        android:textColor="#161d6f"
        android:textSize="30dp"
        android:textStyle="bold"
    />
    </TableRow>
    <TableRow android:background="#98ded9" android:padding="5px" >

```

```

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Name:disha Marks:66.40%"
    android:textColor="#161d6f"
    android:textSize="30dp"
    android:textStyle="bold"
/>
</TableRow>

<TableRow android:background="#c7ffd8" android:padding="5px" >

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Name:Swati Marks:78.76%"
        android:textColor="#161d6f"
        android:textSize="30dp"
        android:textStyle="bold"
    />
</TableRow>
<TableRow android:background="#98ded9" android:padding="5px" >

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:text="Name:disha Marks:66.40%"
        android:textColor="#161d6f"
        android:textSize="30dp"
        android:textStyle="bold"
    />
</TableRow>

</TableLayout>

```

MainActivity.java file:

```

package com.example.hello;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

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

```

AndroidManifest.xml file:

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

```

```

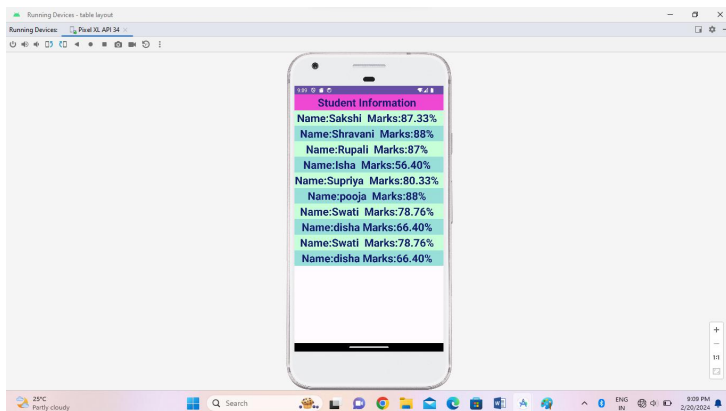
<application
    android:allowBackup="true"
    android:dataExtractionRules="@xml/data_extraction_rules"
    android:fullBackupContent="@xml/backup_rules"
    android:icon="@mipmap/ic_launcher"
    android:label="@string/app_name"
    android:roundIcon="@mipmap/ic_launcher_round"
    android:supportsRtl="true"
    android:theme="@style/Theme.Absulate"
    tools:targetApi="31">
    <activity
        android:name=".MainActivity"
        android:exported="true">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
</application>

</manifest>

```

O/P:-



2. Write a Program to display All the data type in object oriented programming using Frame Layout.

Activity_main.xml file:-

```

<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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">

```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"

    android:text="Data types"
    android:textColor="#161d6f"
    android:textSize="30dp"
    android:textStyle="bold" />

<TextView
    android:layout_width="wrap_content"
    android:id="@+id/t1"
    android:layout_marginVertical="150dp"
    android:layout_height="wrap_content"
    android:text="1) Integer"
    android:textSize="20dp"
/>
<TextView
    android:layout_width="70dp"
    android:layout_height="50dp"
    android:layout_marginVertical="180dp"
    android:text="2) Character"

    android:textSize="20dp"/>
<TextView
    android:layout_width="wrap_content"
    android:id="@+id/t2"
    android:layout_marginVertical="240dp"
    android:layout_height="wrap_content"
    android:text="3) Float"
    android:textSize="20dp"
/>
<TextView
    android:layout_width="wrap_content"
    android:id="@+id/t3"
    android:layout_marginVertical="270dp"
    android:layout_height="wrap_content"
    android:text="4) Long"
    android:textSize="20dp"
/>
<TextView
    android:layout_width="wrap_content"
    android:id="@+id/t4"
    android:layout_marginVertical="260dp"
    android:layout_height="wrap_content"
    android:text="5) double"
    android:textSize="20dp"
/>
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginVertical="250dp"
    android:layout_gravity="center"
    android:text="Submit"
```

```
></Button>
</FrameLayout>
```

MainActivity.java file:

```
package com.example.hello;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {

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

AndroidManifest.xml file:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Absolute"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

O/P:-



