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</pre>
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);
}
AndroidMenifest.xml file:
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    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>
```



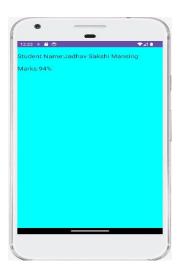
2. Write a Program to Display Student Name and Marks.

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</pre>
```

```
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 {
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
}
AndroidMenifest.xml file:
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    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.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" />
```



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"</pre>
    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);
    }
}
```

AndroidMenifest.xml file:

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



Practical No 6

Exercise:

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

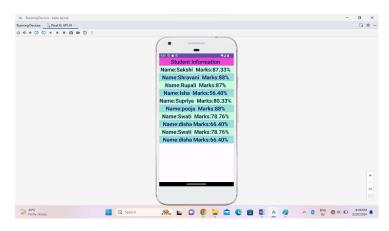
Activity_main.xml file:-

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



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);
AndroidMenifest.xml file:
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    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 ⊾ ▼ .%. &
Data types
1) Integer
```



