Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: **Kavya Balakrishnan**   SRN: **2022010005**

Experiment No: 4   Class: TYIT

Practical No: 4

AIM: Programming UI elements - AppBar, Fragments, UI Components

- **AppBar**

Code :

File->new resources directory-> select menu

File-> new menu file -> give a name

Write this code in menu file

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


    <item
        android:id="@+id/action_search"
        android:icon="@android:drawable/ic_menu_search"
        android:title="Search"
        app:showAsAction="ifRoom" />
    <item
        android:id="@+id/action_settings"
        android:title="Settings"
        app:showAsAction="never"/>


</menu>
```

Write this in main.xml file

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


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

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT
_____

```
      android:layout_width="match_parent"
      android:layout_height="match_parent"
      android:orientation="vertical"
      android:gravity="center">
  <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text=" Welcome to App Bar Example"
      android:textSize="18sp"/>
  </LinearLayout>

</android.support.constraint.ConstraintLayout>
```

Write main.kt

```kotlin
package com.example.myapplication

import android.support.v7.app.AppCompatActivity
import android.os.Bundle
import android.view.Menu
import android.view.MenuItem
import android.widget.Toast
class MainActivity: AppCompatActivity() {
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
    supportActionBar?.title = "ActionBar Example"
// Enable the back button (optional)
    supportActionBar?.setDisplayHomeAsUpEnabled(true)
  }

  override fun onCreateOptionsMenu(menu: Menu?): Boolean {
    menuInflater.inflate(R.menu.top_app_bar,menu)
    return true
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT

_____

```kotlin
    }

    override fun onOptionsItemSelected(item: MenuItem): Boolean {
        return when (item.itemId) {
            android.R.id.home -> {
                Toast.makeText(this, "Back button Clicked", Toast.LENGTH_SHORT).show()
                true
            }
            R.id.action_search -> {
                Toast.makeText(this, "Serach clicked", Toast.LENGTH_SHORT).show()
                true
            }
            R.id.action_settings -> {
                Toast.makeText(this, "Settings clicked", Toast.LENGTH_SHORT).show()
                true
            }
            else -> super.onOptionsItemSelected(item)
        }

    }
    }
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT

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

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="20dp">

    <EditText
        android:id="@+id/etName"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Name" />

    <EditText
        android:id="@+id/etEmail"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Email" />

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_margin="5dp"
        android:orientation="horizontal">

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="match_parent"
            android:layout_marginEnd="10dp"
            android:text="Select Gender" /> <!-- Adjust margin as needed -->

        <RadioGroup
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT

```
        android:id="@+id/radioSex"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <RadioButton
          android:id="@+id/radioFemale"
          android:layout_width="match_parent"
          android:layout_height="match_parent"
          android:text="Female" />

        <RadioButton
          android:id="@+id/radioMale"
          android:layout_width="75dp"
          android:layout_height="wrap_content"
          android:checked="true"
          android:text="Male" />

    </RadioGroup>
  </LinearLayout>



  <EditText
    android:id="@+id/etPassword"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Enter Password"
    android:inputType="textPassword" />
  <EditText
    android:id="@+id/etRePassword"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint=" Re-Enter Password"
```

Tilak Education Society's
S.K College of Science & Commerce
(Affiliated to University of Mumbai)
NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution
Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706
Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005
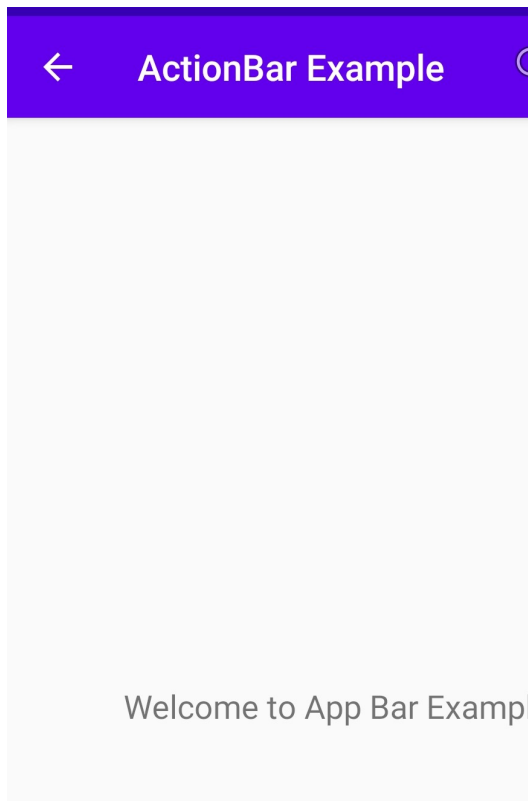

Experiment No: 4   Class: TYIT
_____

```
        android:inputType="textPassword" />


 <Button
        android:id="@+id/btnRegister"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Register" />
</LinearLayout>
```


Output

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   **SRN: 2022010005**

Experiment No: 4   **Class: TYIT**

_____

- UI components

Code:

DisplayActivity.kt

```kotlin
package com.example.myapplication

import android.os.Bundle

import android.widget.TextView

import androidx.appcompat.app.AppCompatActivity


class DisplayActivity : AppCompatActivity() {

  override fun onCreate(savedInstanceState: Bundle?) {

    super.onCreate(savedInstanceState)

    setContentView(R.layout.activity_display)


    val email = intent.getStringExtra("EMAIL")

    val gender = intent.getStringExtra("GENDER")


    val textView = findViewById<TextView>(R.id.tvDisplayInfo)

    textView.text = "Email: $email\nGender: $gender"

  }

}
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: **Kavya Balakrishnan**   SRN: **2022010005**

Experiment No: 4   **Class: TYIT**

_____

MainActivity.kt

package com.example.myapplication

import android.content.Intent

import android.os.Bundle

import android.widget.*

import androidx.appcompat.app.AppCompatActivity

class MainActivity : AppCompatActivity() {

    private lateinit var etEmail: EditText

    private lateinit var etPassword: EditText

    private lateinit var etRePassword: EditText

    private lateinit var radioSex: RadioGroup

    private lateinit var btnRegister: Button

    override fun onCreate(savedInstanceState: Bundle?) {

        super.onCreate(savedInstanceState)

        setContentView(R.layout.activity_main)

        etEmail = findViewById(R.id.etEmail)

        etPassword = findViewById(R.id.etPassword)

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   **SRN: 2022010005**

Experiment No: 4   **Class: TYIT**

_____

```kotlin
etRePassword = findViewById(R.id.etRePassword)

radioSex = findViewById(R.id.radioSex)

btnRegister = findViewById(R.id.btnRegister)


btnRegister.setOnClickListener {

  val email = etEmail.text.toString()

  val password = etPassword.text.toString()

  val rePassword = etRePassword.text.toString()


  val selectedId = radioSex.checkedRadioButtonId

  val gender = findViewById<RadioButton>(selectedId)?.text.toString()


  if (password == rePassword) {

    val intent = Intent(this, DisplayActivity::class.java).apply {

      putExtra("EMAIL", email)

      putExtra("GENDER", gender)

    }

    startActivity(intent)

  } else {

    Toast.makeText(this, "Passwords do not match!",
Toast.LENGTH_SHORT).show()

  }
```

Tilak Education Society's
S.K College of Science & Commerce
(Affiliated to University of Mumbai)
NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution
Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706
Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: **Kavya Balakrishnan**   SRN: **2022010005**

Experiment No: 4   **Class: TYIT**
_____

```
    }

  }

}
```

Activity_display.xml

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

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

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:orientation="vertical"

    android:padding="20dp"

    android:gravity="center">


    <TextView

        android:id="@+id/tvDisplayInfo"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:textSize="18sp"

        android:text="User Info will appear here" />


</LinearLayout>
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT
_____

Activity_main.xml

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


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

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    android:background="@color/white"

    android:gravity="center_horizontal|center_vertical"

    android:orientation="vertical"

    android:padding="50dp">



    <ImageView

        android:id="@+id/imageBeforeLogo"

        android:layout_width="50dp"

        android:layout_height="50dp"

        android:layout_gravity="center"

        android:src="@drawable/downlaod" />


    <TextView

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: **Kavya Balakrishnan**   **SRN: 2022010005**

Experiment No: 4   **Class: TYIT**

```
        android:layout_gravity="center"

        android:text="S. K. College of Science  and Commerce" />


    <TextView

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_gravity="center|center_horizontal|center_vertical"

        android:scaleX="1"

        android:scaleY="1"

        android:text="      Tilak Education Society's S. K. College of Sciencdited A Grade with
3.17 CGPA"

        android:textAlignment="center"

        android:textSize="12sp" />



    <EditText

        android:id="@+id/etEmail"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:hint="Enter Email" />


    <LinearLayout
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT

```xml
android:layout_width="match_parent"

android:layout_height="wrap_content"

android:layout_margin="5dp"

android:orientation="horizontal">


<TextView

    android:layout_width="wrap_content"

    android:layout_height="match_parent"

    android:layout_marginEnd="10dp"

    android:text="Select Gender" /> <!-- Adjust margin as needed -->


<RadioGroup

    android:id="@+id/radioSex"

    android:layout_width="wrap_content"

    android:layout_height="wrap_content"

    android:orientation="horizontal">


    <RadioButton

        android:id="@+id/radioFemale"

        android:layout_width="match_parent"

        android:layout_height="match_parent"

        android:text="Female" />
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   SRN: 2022010005

Experiment No: 4   Class: TYIT

```
    <RadioButton

        android:id="@+id/radioMale"

        android:layout_width="75dp"

        android:layout_height="wrap_content"

        android:checked="true"

        android:text="Male" />


    </RadioGroup>

  </LinearLayout>


  <EditText

      android:id="@+id/etPassword"

      android:layout_width="match_parent"

      android:layout_height="wrap_content"

      android:hint="Enter Password"

      android:inputType="textPassword" />


  <EditText

      android:id="@+id/etRePassword"

      android:layout_width="match_parent"

      android:layout_height="wrap_content"
```

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan   **SRN: 2022010005**

Experiment No: 4   **Class: TYIT**

---

android:hint=" Re-Enter Password"

android:inputType="textPassword" />

<Button

android:id="@+id/btnRegister"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:text="Register" />

</LinearLayout>

Tilak Education Society's

S.K College of Science & Commerce

(Affiliated to University of Mumbai)

NAAC Accredited "A" Grade with 3.17 CGPA & ISO 9001:2015 Certified Institution

Plot 31, Sector 25, Seawoods, Nerul (East), Navi Mumbai.400706

Email:skc.nerul@gmail.com Website: www.tilakedu.com

Name of the Student: Kavya Balakrishnan **SRN: 2022010005**

Experiment No: 4 **Class: TYIT**

OUTPUT:

Registration form:

Display: