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Subject/Course:	Advanced Mobile Programming		
Topic	Programming UI Elements		

Application Bar

7.a) Design a mobile application to demonstrate working of App Bar
Kt File

```kotlin
package com.example.pract5b_appbar

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)

        val meraBar = supportActionBar
        meraBar?.title =  "Action Bar"
        meraBar?.subtitle = "AMP practical"
        meraBar?.setIcon(R.drawable.image4)
        meraBar?.setDisplayUseLogoEnabled(true)
        meraBar?.setDisplayShowHomeEnabled(true)
    }
    override fun onCreateOptionsMenu(menu: Menu?): Boolean {
        menuInflater.inflate(R.menu.menu1,menu)
        return super.onCreateOptionsMenu(menu)
    }

    override fun onOptionsItemSelected(item: MenuItem): Boolean {
        when(item.itemId){
            R.id.search -> Toast.makeText(this,"Search icon Pressed",Toast.LENGTH_SHORT).show()
            R.id.Location -> Toast.makeText(this,"Location icon Pressed",Toast.LENGTH_SHORT).show()
            R.id.Download -> Toast.makeText(this,"Download icon Pressed",Toast.LENGTH_SHORT).show()
        }
        return super.onOptionsItemSelected(item
)
    }
}
```

Main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.pract5b_appbar">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@drawable/image4"
        android:label="@string/app_name"
        android:roundIcon="@drawable/image5"
        android:supportsRtl="true"
        android:theme="@style/Theme.Pract5b_appbar"
        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>
```
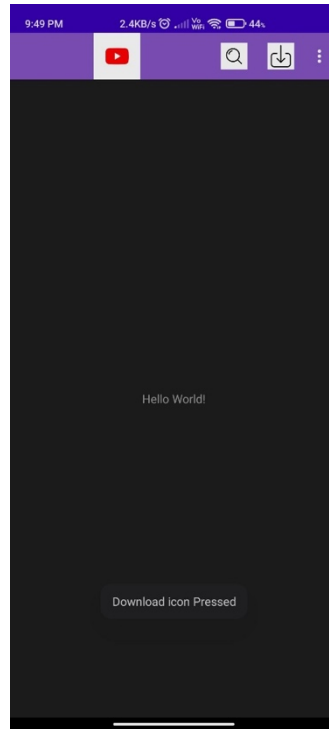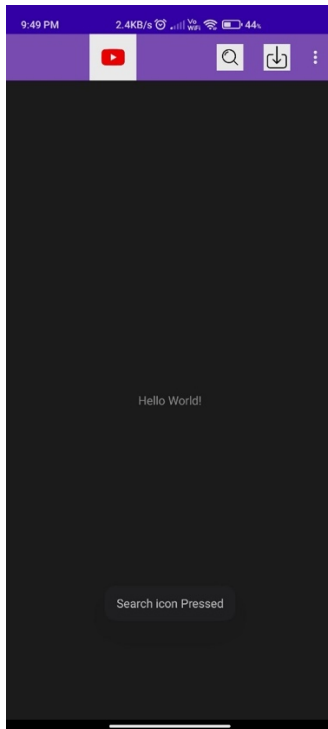
Menu.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu 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">
    <item android:id="@+id/search"
        android:title="Search"
        android:icon="@drawable/search"
        android:orderInCategory="100"
        app:showAsAction="ifRoom"/>
    <item android:id="@+id/Location"
        android:title="Location"
        android:icon="@drawable/image5"
        android:orderInCategory="101"
        app:showAsAction="never"/>
    <item android:id="@+id/Download"
        android:title="Download"
        android:icon="@drawable/image6"
        android:orderInCategory="102"
        app:showAsAction="ifRoom"/>

</menu>
```

Output:

Hello World!

Search icon Pressed

Hello World!

Download icon Pressed

Login Form

7.b) Design a mobile application to create a login form
activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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">

    <LinearLayout
        android:id="@+id/linearLayout"
        android:layout_width="0dp"
        android:layout_height="354dp"
        android:layout_marginStart="5dp"
        android:layout_marginTop="5dp"
        android:layout_marginEnd="5dp"
        android:orientation="vertical"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent">


        <TextView
```

```xml
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Login Page" />


    <TextView
        android:id="@+id/labelname"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Name" />

    <EditText
        android:id="@+id/editname"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Your Name"
        android:inputType="text"
        android:minHeight="48dp" />

    <TextView
        android:id="@+id/labelpassword"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Password" />

    <EditText
        android:id="@+id/editpass"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Password"
        android:inputType="text"
        android:minHeight="48dp" />

    <TextView
        android:id="@+id/labeldiv"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Division" />

    <EditText
        android:id="@+id/editdiv"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Your Division"
        android:inputType="text"
        android:minHeight="48dp" />

    <TextView
        android:id="@+id/labelcourse"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Course" />
```

```xml
        <EditText
            android:id="@+id/editCourse"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:hint="Enter Your Course"
            android:inputType="text"
            android:minHeight="48dp" />


        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="horizontal">

            <Button
                android:id="@+id/btnsub"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="Submit" />

            <Button
                android:id="@+id/btnres"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="Reset" />
        </LinearLayout>
    </LinearLayout>

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

MainActivity.kt

```kotlin
package com.example.practical4b


import android.support.v7.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.Toast


class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val submitbtn = findViewById<Button>(R.id.btnsub)
        val resetbtn = findViewById<Button>(R.id.btnres)
        val name = findViewById<EditText>(R.id.editname)
        val pass = findViewById<EditText>(R.id.editpass)
        val div = findViewById<EditText>(R.id.editdiv)
        val course = findViewById<EditText>(R.id.editCourse)
```

```
        submitbtn.setOnClickListener {
            Toast.makeText(this, "Your Record has been submited", Toast.LENGTH_LONG).show()
        }

        resetbtn.setOnClickListener {
            Toast.makeText(this, "Reset Successful", Toast.LENGTH_LONG).show()
            name.editableText.clear()
            pass.editableText.clear()
            div.editableText.clear()
            course.editableText.clear()
        }
    }
}
```

Output