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|  | **SUKKUR IBA UNIVERSITY**  MERIT – QUALITY – EXCELLENCE  Lab handout 03 | | | |  |
| Mobile Application Development (CSE-426), Fall 2022, BE-EE(CS)-VIII | | | | | |
| Name: **Shakir Ali** | | CMS ID#: **031-19-0009** | | Instructor: **Dr. Abdul Aziz** | |
| Section: A Lab group: NA | | Department: Electrical Engineering | | Marks obtained out of 100% | |
| **NOTE: Must follow submission instructions** | | |  | | |

**Understanding and using linear layout**

**Lab Exercise and Submission**

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| Exercise 1 |
| Design and demonstrate linear layout using following attributes to produce similar kind of results as shown in the figures below.   |  |  | | --- | --- | | android:layout\_width=  android:layout\_height= | "wrap\_content"  "match\_parent"  "16dp" | | **android:orientation=** | **"vertical"**  **"horizontal"** | |  |  | |
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| Attach AVD application output here: |
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| Insert XML file code here:  *<?*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:padding="16dp"  tools:context=".MainActivity">   <EditText  android:id="@+id/editTextTo"  android:layout\_width="50dp"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="@string/toMail"  android:inputType="textPersonName" />   <EditText  android:id="@+id/editTextMessage"  android:layout\_width="85dp"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="@string/messageText"  android:inputType="text" />   <Button  android:id="@+id/btnSend"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="@string/btnSend" />   </LinearLayout> |

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| Exercise 2 |
| Design and demonstrate linear layout using following attributes to produce similar kind of results as shown in the figures below. |
| |  |  | | --- | --- | | android:padding=  android:paddingTop  android:paddingStart=  android:paddingEnd=  android:paddingBottom=  android:paddingHorizontal=  android:paddingVertical= | "16dp"  "32dp" | |
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| Screenshot of AVD output here: |
| Insert XML codes here:  *<?*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:paddingBottom="16dp"  android:paddingLeft="16dp"  android:paddingRight="16dp"  android:paddingTop="32dp"  tools:context=".MainActivity">   <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Lab #03: Task 02"  android:textSize="20dp"  />  </LinearLayout> |

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| Exercise 3 |
| With linear layout use multiple EditText elements in a single application to demonstrate the effect of following EditText attributes as shown in the table below. Use same hint as the inputType.  **<EditText**  **android:layout\_width="match\_parent"**  **android:layout\_height="wrap\_content"**  **android:hint="text"**  **android:inputType="text" />** |
| Screenshot of AVD output here: |
| Insert XML codes here:  *<?*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"  tools:context=".MainActivity">   <EditText  android:id="@+id/editTypeText"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="text"  android:inputType="text" />   <EditText  android:id="@+id/editTypeTextMultiLine"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="textMultiLine"  android:inputType="textMultiLine" />   <EditText  android:id="@+id/editTypePhone"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="phone"  android:inputType="phone" />   <EditText  android:id="@+id/editTypeTextPassword"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="textPassword"  android:inputType="textPassword" />   <EditText  android:id="@+id/editTypeTextCapSentences"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="textCapSentences"  android:inputType="textCapSentences" />    </LinearLayout> |

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| Exercise 4 |
| Design a linear layout UI to demonstrate the weight attribute for middle element EditeText as shown in the figure below. |
| Screenshot of AVD output here: |
| Insert XML codes here:  *<?*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:id="@+id/linearLayout"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:orientation="vertical"  android:paddingLeft="10dp"  tools:context=".MainActivity">   <EditText  android:id="@+id/editTextTo"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:hint="To"  android:inputType="textPersonName" />   <EditText  android:id="@+id/editTextMessage"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:layout\_weight="1"  android:hint="Message"  android:inputType="text" />  <Button  android:id="@+id/btnSend"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Send"  />  </LinearLayout> |

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| Exercise 5 |
| Design a linear layout UI to demonstrate the gravity attribute with following values for EditText element. |
| Screenshot of AVD output here: |
| Insert XML codes here:  *<?*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:id="@+id/linearLayout"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:orientation="vertical"  android:padding="10dp"  tools:context=".MainActivity">   <EditText  android:id="@+id/editTextGravityTop"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="top"  android:layout\_weight="1"  android:hint="top"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityBottom"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="bottom"  android:layout\_weight="1"  android:hint="bottom"  android:inputType="text" />  <EditText  android:id="@+id/editTextGravityStart"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="start"  android:layout\_weight="1"  android:hint="start"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityEnd"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="end"  android:layout\_weight="1"  android:hint="end"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityCenterVertical"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="center\_vertical"  android:layout\_weight="1"  android:hint="center\_vertical"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityCenterHorizontal"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="center\_horizontal"  android:layout\_weight="1"  android:hint="center\_horizontal"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityCenter"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="center"  android:layout\_weight="1"  android:hint="center"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityFillVertical"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="fill\_vertical"  android:layout\_weight="1"  android:hint="fill\_vertical"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityFillHorizontal"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="fill\_horizontal"  android:layout\_weight="1"  android:hint="fill\_horizontal"  android:inputType="text" />   <EditText  android:id="@+id/editTextGravityFill"  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:ems="10"  android:gravity="fill"  android:layout\_weight="1"  android:hint="fill"  android:inputType="text" />       </LinearLayout> |