AND-801: Android Application Development Exam Sample
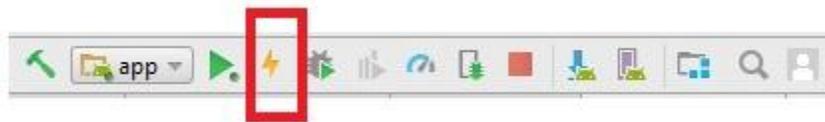
Q1. Android is an open source, Linux-based software stack.

a. True
b. False

Answer: a

Q2- Which of the following choices is the main role of the button which is illustrated in the red rectangle over the Android Studio tool bar?

a- Run button.
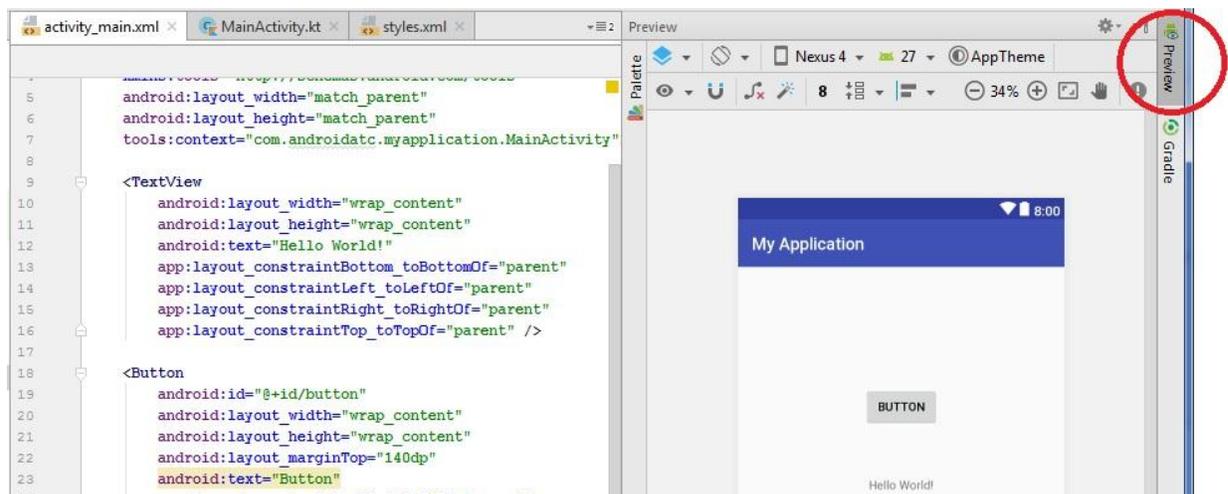b. Debug button.
c- Apply changes button.
d- ADV manager button.

Answer: c

Q3. Each Android application runs in its own process and with its own instance of ART on devices running Android version 8.0 (API Level 26) or higher.

a. True
b. False

Answer: a

Q4-Which of the following choices is the main role of the Preview button which is illustrated in the red circle of the vertical Android Studio tool bar?

a- It shows the activity layout in text (XML) and design mode at the same time.
b- It shows the activity layout in print review.
c- It shows the Java or Kotlin code of an activity.
d- It shows the activity blue print preview mode.

Answer: a

Q5. The Android library code is organized in such a way that it can be used by multiple Android applications.

a. True
b. False

Answer: a

Q6- The following image shows part of the content inside file activity_main.xml in an Android application:

Which of the following options is correct?

```xml
<RadioGroup>
    <RadioButton
    android:id="@+id/ radioYes "
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>

    <RadioButton
    android:id="@+id/ radioNo "
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>
</RadioGroup>
```

a- The app user can select one radio button only at a time.
b- The app user can select the two radio buttons at the same time.
c- The only purpose of RadioGroup tag is adding a group of colors to the inside of the radio buttons.
d- This is not an XML code; it is a Kotlin code.

Answer: a

Q7- android.view : This library contains the basic classes used for developing graphical user interface and for handling the user's interaction with the user interface

a. True
b. False

Answer: a

Q8- Fill in the blank space in the following sentence with the correct choice:
The …………………… arranges widgets in positions relative to each other.

a- RelativeLayout
b- Linear Layout
c- ConstraintLayout
d- Table Layout

Answer: a

Q9- android.widget : This library contains (mostly visual) user interface components such as Button, Spinner, ListView to be used in your applications.

a. True
b. False

Answer: a

Q10- Fill in the blank space in the following sentence with the correct choice:
The ………………………… is a layout that arranges other views either horizontally in a single column or vertically in a single row.
a- LinearLayout
b- RelativeLayout
c- ConstraintLayout
d- Frame Layout

Answer: a

Q11. Android content providers are used to manage and share application data between applications.

a. True
b. False

Answer: a

Q12. Which of the following choices is the best answer to fill the empty space in the following sentence?
Adding a new color to the colors.xml file in Android Studio (/res/values/colors.xml) helps the app developers to use this new color as attribute value for the ……………. attribute in all these app layouts.

a- android:textColor
b- Kotlin:textcolor
d- Java:textcolor
d- color:textformat

Answer: a

Q13. Views are objects that are drawn on the screen. View is the parent class of all activity user interface components. Each activity is made up of a set of views grouped together within a layout.

a. True
b. False

Answer: a

Q14. As an Android developer, to change the font size of a text in Android layout, you should use attribute "android:textSize". Which of the following choices is the recommended syntax to change the font size to 18?

a- android:textSize="18sp"
b- android:textSize="18dp"
c- android:textSize="18point"
d- android:textSize="18sd"

Answer: a

Q15. Which of the below choices is the best answer to fill the empty space in the following sentence?

If you want to give all text widgets in an app the same format such as font color, font size, and font family, you should add the style attribute to the TextView XML tags in layout file and set the attribute value to the same style name.
You should define that style by adding a new style tag <style name="style_name"> inside
………………………….

a- styles.xml file
b- AndroidManifest.xml file
c- MainActivity.java or MainActivity.kt file
d- activity_main.xml file

Answer: a

Q16. Fill in the blank space in the following sentence with the correct choice:

To configure your style as the theme for all your app activities (entire app), open AndroidManifest.xml, and set the theme by adding android:theme="@style/your_style_name" attribute to the ……………………….

a- <application> tag.
b- <activity> tag.
c- <intent-filter> tag.
d- <manifest> tag.

Answer: a

Q17. Fill in the blank space in the following sentence with the correct choice:
The following image shows the content of an AndroidManifest.xml file of an Android app.
The role of adding the attributes "android:icon" and "android:roundIcon" is

…………………………………….

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
 package="com.androidatc.lesson_06_android_layout">

 <application
 android:allowBackup="true"
 android:icon="@mipmap/android_atc"
 android:label="@string/app_name"
 android:roundIcon="@mipmap/android_atc_round"
 android:supportsRtl="true"
 android:theme="@style/ATC2019">
 <activity android:name=".MainActivity">
     <intent-filter>
     <action android:name="android.intent.action.MAIN" />

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

</manifest>
```

a- Set an app icon image on a phone, on any smart device, or in Google play store.
b- Show the app icon in Android Studio title bar only.
c- Show the app icon in Android Studio emulator only.
d- Show this icon if this app is installed on IPhone devices only.

Answer: a

Q18. Android SDK platform is a set of libraries and APIs that provide necessary classes, methods and interfaces to develop Android applications and allow you to compile your code.

a. True
b. False

Answer: a

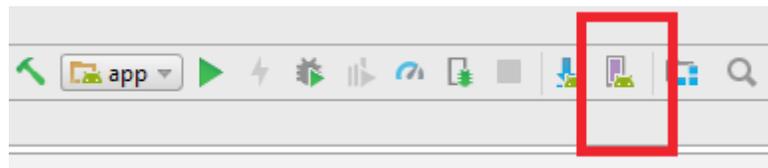---

Q19. The following Android code displays a Toast message. Which of the following is the correct parameter to replace Toast.xyz in this line of code?

Toast.makeText(this,"Message saved as draft",Toast.xyz).show( )

a- Toast.LENGTH_LONG
b- Toast.shortTime
c- Toast.sec.4
d- Toast.Time.4s

Answer :a

Q20. This image displays part of Android Studio tool bar. What does the button illustrated with a red rectangle represent?

a. AVD Manager
b. Gradle Console.
c. Save App.
d. Save As App.

Answer: a

Q21. Which of the following files has the correct name for a layout design file of an activity in an Android app?

a. MainActivity.java or MainActivity.kt
b. activity_main.xml
c. Sample.class
d. Gradle.sql

Answer: b

Q22. Which of the following is true about the following line of code:
button.setOnClickListener({ })

a. It only saves changes in a text field.
b. It sets the number of clicks the user presses to run the application.
c. The system executes the code you write in setOnClickListener({ }) after the user presses the button.
d. It sets the time and date of run process.

Answer: c

Q23. Which of the following Android Studio folders includes drawable files for different launcher icon densities?

a. Mipmap
b. Layout
c. Drawable
d. Values

Answer: a

Q24. Which of the following layouts is fully integrated with Android Studio's layout editor so you can build the full layout without the need to edit the XML manually?

a. Constraint Layout
b. Linear Layout
c. Relative Layout
d. Table Layout

Answer: a

Q25. The following Android code will show the small popup message "Message saved as draft" for 3.5 seconds, and then automatically disappears:

Toast.makeText(this, "Message saved as draft", Toast.LENGTH_LONG).show( )

a. True
b. False

Answer: a

Q26. The following image displays an AndroidManifest.xml file for an Android app. Which of the following choices is correct about this file?

```xml
<application
  android:allowBackup="true"
  android:icon="@mipmap/ic_launcher"
  android:label="@string/app_name"
  android:roundIcon="@mipmap/ic_launcher_round"
  android:supportsRtl="true"
  android:theme="@style/AppTheme">

  <activity android:name=".MainActivity">
  <intent-filter>
  <action android:name="android.intent.action.MAIN" />
  <category android:name="android.intent.category.LAUNCHER" />
  </intent-filter>
  </activity>

  <activity android:name=".Second">
  </activity>
  </application>
```

a- This app consists of three activities and MainActivity is the launcher activity.
b- This app consists of two activities and Second is the launcher activity.
c- This app consists of one activity and MainActivity is the launcher activity.
d- This app consists of two activities and MainActivity is the launcher activity.

Answer: D

Q27. A standard Android toast notification appears near the bottom of the screen, centered horizontally. To change this position you can use ……………………

a. toast.setGravity
b. toast.coordinates
c. toast.position
d. toast.location

Answer: a

Q28. If you have an Android application having 10 activities, and you want to specify one of them as launcher (startup) activity, which of the following files you can configure an activity as launcher (startup) activity?

a. MainActivity.java or MainActivity.kt
b. AndroidManifest.xml
c. activity_main.xml
d. strings.xml

Answer: b

Q29. If you want to configure a link between two Android activities in the same Android application, you need to use:

a. Intent
b. Gradle
c. Toast
d. Progressbar

Answer: a

Q30. There are three different action buttons you can add to Android AlertDialog class. Which of the following choices is NOT correct about Android AlertDialog class?

a. You can add more than one positive button to the same AlertDialog class.
b. Positive action button is used to accept and continue with the "OK" action.
c. Negative action button is used to cancel the action.
d. Neutral action button is used when the user does not want to proceed with the action. It appears between the positive and negative buttons. For example, the action might be "Remind me later."

Answer: a

Q31. Which of the following Android classes can be defined by this statement?
The user can touch by thumb and drag it left or right to set the current progress level.

a. Progressbar
b. TimePickerDialog
c. TunnerYbar
d. SeekBar

Answer: d

Q32. Starting in Android 8.0, any Android notification must contain four main objects: a small icon, a title, a detail text, and a …

a. Notification Channel.
b. Notification border.
c. Notification color.
d. Notification Database file.

Answer: a

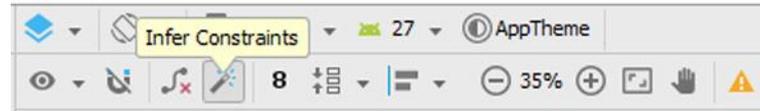
Q33. The SharedPreferences class provides a general framework that lets you save and retrieve persistent key-value pairs of primitive data types.

a. True
b. False

Answer: a

Q34. Check the following image, and then select which of the following choices defines the "Infer Constraints" button of the Android Studio tool bar?

a- It is used to set the constraints (margins) of any Android widget such as TextView or Button by selecting the widget, then clicking "Infer Constraints" button.
b- It is used to run Android wizard to add new type of Android emulator.
c- It is used to start Android publishing wizard.
d- It is used to import another Android app to the existing app.

Answer: a

Q35. Check the following image which is a part of AndroidManifest.xml file, then select which of the following choices is the correct description of the gray highlighted color of this code?

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
  package="com.androidatc.lesson_08_webview">
  <uses-permission android:name="android.permission.INTERNET" />

  <application
  android:allowBackup="true"
  android:icon="@mipmap/ic_launcher"
  android:label="@string/app_name"
  android:roundIcon="@mipmap/ic_launcher_round"
  android:supportsRtl="true"
```

1- This permission tag allows this app to connect to the Internet.
2- This permission tag allows other apps to make remote connection to this app.
3- This permission tag allows this app to connect to its SQLite database.
4- This permission tag has been written in the wrong location, it must be written inside <application> tag.

Answer: a

Q36. SQLite is an Open Source Database system embedded into every Android device.
a. True
b. False

Answer: a

Q37. If your Android application creates a SQLite database, which of the following is the default directory to save this database file?

a. /data/data/APP_NAME/databases/DATABASE_FILE.
b. /dataSQL/data/APP_NAME/databases/DATABASE_FILE.
c. /database/data/APP_NAME/databases/DATABASE_FILE_SQLApp.
d. /database/SQLite_Data/APP_NAME/databases/DATABASE_FILE.

Answer: a

Q38. Which of the following classes has methods to create, delete, execute SQLite commands and perform other common SQLite database management tasks?

a. SQLiteOpenHelper
b. SQLiteDatabase
c. Cursor
d. Progressbar

Answer: a

Q39. ORMLite stands for Object Relational Mapping Lite. It is a third-party library that provides a simple and lightweight functionality of persisting objects to SQL databases.
a. True
b. False

Answer: a

Q40. Which of the following choices is NOT correct about ORMLite?

a. Manual generation of SQL to create & drop tables.
b. Simple setup of classes by adding annotations.
c. Making native calls to Android SQLite database APIs.
d. Provides a simple and lightweight functionality of persisting objects to SQL databases.

Answer: a

Q41. What does an Android app need to have in order to include a Google map and access the Google Maps servers?

a. Free Space about 25 MB in local storage.
b. Google API key.
c. API level 26 and higher.
d. Add a class called Google to Android app.

Answer: b

Q42. When you create an Android app to capture a user's location, what two main objects should be utilized from Android SDK?

a. LocationManager and LocationListener
b. Google.java and Maps.class
c. Link.object and map.object
d. Maps.Google.class and SQLMaps.object

Answer: a

Q43. Check the following image which includes a part of activity_main.xml file of an Android application. Which of the following choices is correct about this code?

```xml
<fragment xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/myMap"
    android:name="com.google.android.gms.maps.SupportMapFragment"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity" />
```

a- This is a fragment layout to show the Google map.
b- This code will give this app permission to connect to Google Gmail.
c- This code will give this app permission to connect to Google SQLite.
d- This code is related to Android RecyclerView layout.

Answer: a

Q44. What is the main role of adding the following permission tag to AndroidManifest.xml file in an Android app?

```xml
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
```

a- Allow the Android app to access the user's precise (exact) location.
b- Allow the Android app to download Google map database.
c- Allow this app to share internal Google map database with another applications.
d- This tag is not enough; you still need to add another tag which includes the user name and password to upload the user's location coordinates to Google map database.

Answer: a

Q45. Check the following image, and then select which of the following choices describe the gray highlighted part of the code?

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.androidatc.lesson_10_gps">
 <application
 android:allowBackup="true"
 android:icon="@mipmap/ic_launcher"
 android:label="@string/app_name"
 android:roundIcon="@mipmap/ic_launcher_round"
 android:supportsRtl="true"
 android:theme="@style/AppTheme">
 <meta-data
 android:name="com.google.android.geo.API_KEY"
 android:value="@string/google_maps_key"/>
<activity android:name=".MainActivity">
 <intent-filter>
 <action android:name="android.intent.action.MAIN" />
 <category android:name="android.intent.category.LAUNCHER" />
 </intent-filter>
 </activity>
</application>
</manifest>
```

a- You got your app a Google API key from https://console.developers.google.com for a free, then added it to string.xml file. Your application needs an API key to access the Google Maps servers.
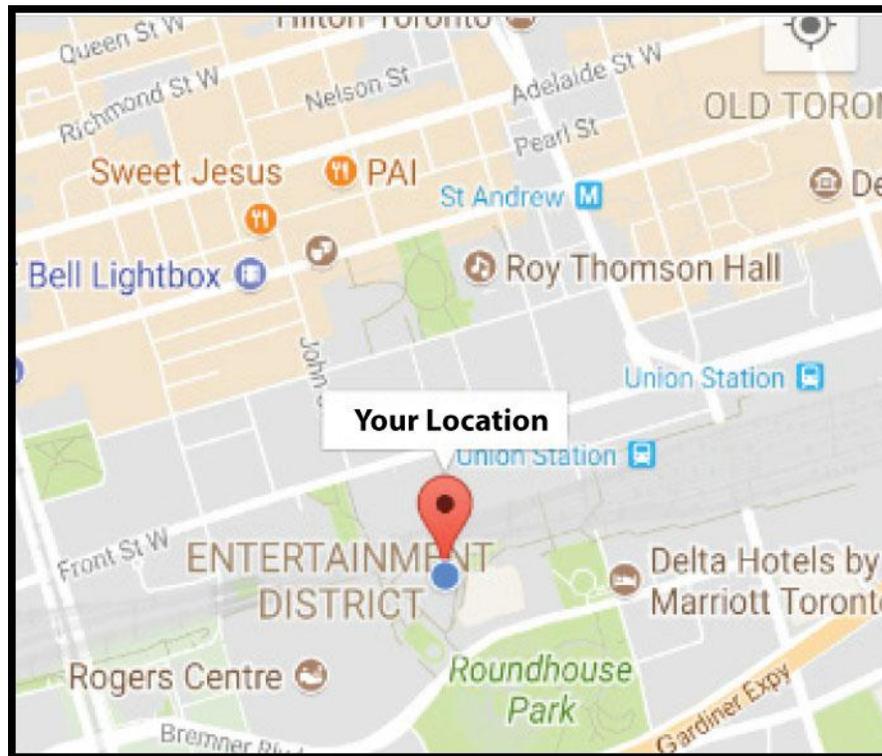
b- Google API key is already installed in SQLite database inside google_maps_key container. Your application needs an API key to access the Google Maps servers.

c- All Android apps use the same Google API key, and it is installed with Android Studio by default; therefore, you don't need to add or configure it.

d- This meta tag only to add your app to Google search engine database.

Answer: a

Q46. Check the following image, and then select which of the following choices is the correct Android method to add a marker on Google maps?

a- GoogleMap.addMarker
b- GoogleMap.Makerpost
c- GoogleMap.Makerlist
d- GoogleMap.GoogleMakerAdd

Answer: a

Q47. Check the following image which includes a code that runs when the user clicks on the button (id =button). This code for an Android app includes three check boxes for the question: "Which countries are in North America?"

Select one of the following choices, where the result will appear when the app user clicks the button.

```
button.setOnClickListener{

        if (USAcheckBox.isChecked) textresult.text="USA: Correct Answer"
        if (CanadacheckBox.isChecked) textresult.text="Canada:Correct Answer"
        if (ChinacheckBox.isChecked) textresult.text="China: Wrong Answer"}
    }
```

a- in TextView widget has id: textresult
b- in TextView widget has id: textresult.text
c- in TextView widget has id: isChecked
d- in TextView widget has blank id

Answer: a

Q48. Check the following image which includes Android code. In this code when the app user clicks the button, the user will get a toast message which states "Hello Android ATC".

After executing the code, where on the android device screen will the toast message appear?

```
Mybutton.setOnClickListener{
                val toast=Toast.makeText(applicationContext,"Hello Android ATC", Toast.LENGTH_SHORT)
                    toast.setGravity(Gravity.TOP, 0, 0)
                toast.show( ) }
```

a- Top middle (center).
b- Top left.
c- Top right.
d- Right middle (center).

Answer: a

Q49. Assume you are developing an Android app which consists of two activities, MainActivity and SecondActivity. The following image includes part of MainActivity code. This file includes a button that has id "Mybutton".

What does the following code snippet do if it is executed after the user taps on the button (id: Mybutton)?
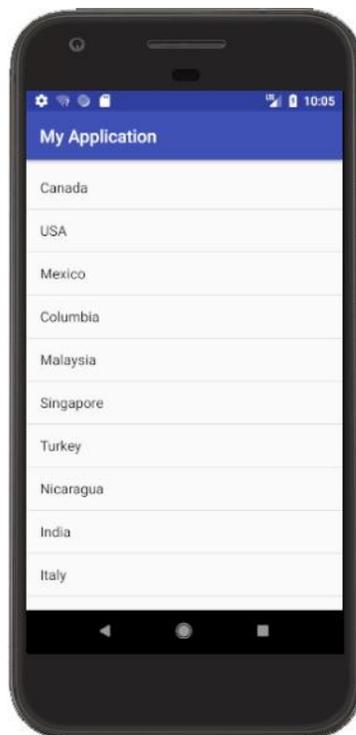
```
Mybutton.setOnClickListener{
        var intent=Intent(this, SecondActivity::class.java)
        startActivity(intent)
    }
```

a- Opens SecondActivity layout.
b- Closes the app, then opens the phone's applications list.
c- Moves "Hello" message to SecondActivity layout.
d- Re-opens the same MainActivity layout.

Answer: a

Q50. Check the image which includes the code of MainActivity.kt file and the image which includes the run result of this code in an Android emulator.

```
class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)
        var countryname:Array<String> = arrayOf("Canada","USA","Mexico","Columbia","Malaysia","Singapore","Turkey","Nicaragua",
            "India","Italy","Tunisia","Chile","Argentina","Spain","Peru")
        var countryAdapter:ArrayAdapter<String> = ArrayAdapter(this,android.R.layout.simple_list_item_1,countryname)
        listview7.adapter=countryAdapter
    }
}
```
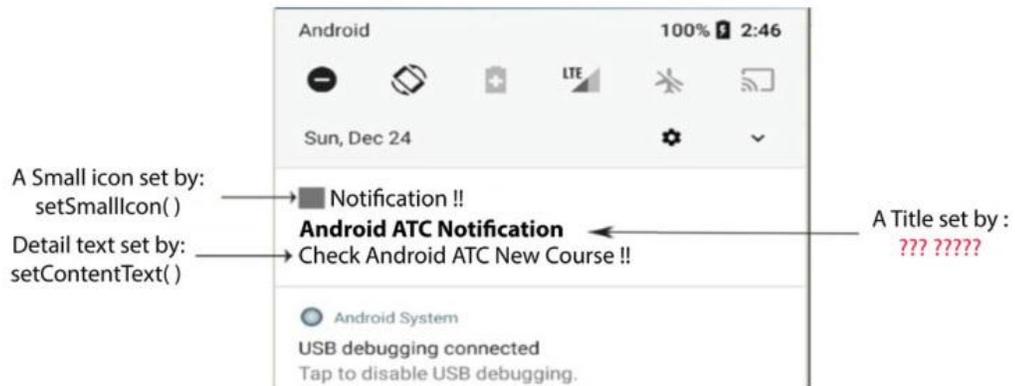

Which of the following choices is correct about the MainActivity.kt code?

a- This code builds Android List View using ListView which has id "listview7".
b- This code builds Android Recycler View and "listview7" is the id of the Recycler view.
c- This code builds a normal array.
d- This code builds Adapter array Recycler list and "listview7" is the id of this array list.

Answer: a

Q51.The following image displays an Android notification labeled with the responsible to configure each part of it.

A Small icon set by: setSmallIcon( )

Detail text set by: setContentText( )

A Title set by: ??? ?????

Which of the following choices sets the Android notification title?

a- setContentTitle( )
b- NotificationTitle( )
c- setTitle( )
d- Notification_setTitle( )

Answer: a