資工二 109590022 林云媐

**Android fundamentals 07.1: AsyncTask**

### Question 1

**For a ProgressBar:**

1. **How do you determine the range of values that a ProgressBar can show?**

**android:min, android:max**

1. **How do you change how much of the progress bar is filled in?**

**android:progress**

### Question 2

**If an AsyncTask is defined as follows:**

**private class DownloadFilesTask extends AsyncTask<URL, Integer, Long>**

1. **What is the type of the value that is passed to doInBackground() in the AsyncTask?**

**URL**

1. **What is the type of the value that is passed to the callback that reports the progress of the task?**

**Integer**

1. **What is the type of the value that is passed to the callback that is executed when the task completes?**

**Long**

### Question 3

**To report progress of the work executed by an AsyncTask, what callback method do you *implement*, and what method do you *call* in your AsyncTask subclass?**

* **Implement onProgressUpdate(). Call publishProgress().**

**Android fundamentals 07.2: AsyncTask and AsyncTaskLoader**

### Question 1

What permissions does your app need to connect to the internet?

* android.permission.INTERNET

### Question 2

How does your app check that internet connectivity is available?

In the manifest:

* request ACCESS\_NETWORK\_STATE permission

In the code:

* Use ConnectivityManager to check for an active network before connecting to the network.

### Question 3

Where do you implement the loader callback method that's triggered when the loader finishes executing its task?

* In the Activity that displays the results of the task. The Activity must implement LoaderManager.LoaderCallbacks.

### Question 4

When the user rotates the device, how do AsyncTask and AsyncTaskLoader behave differently if they are in the process of running a task in the background?

* A running AsyncTask becomes disconnected from the activity and stops running, preserving system resources. A running AsyncTaskLoader automatically restarts execution of its task from the beginning. The activity displays the results.

### Question 5

How do you initialize an AsyncTaskLoader to perform steps, such as initializing variables, that must be done before the loader starts performing its background task?

* In onCreateLoader() in the activity, create an instance of the AsyncTaskLoader subclass. In the loader's constructor, perform initialization tasks.

### Question 6

What methods must an AsyncTaskLoader implement?

loadInBackground(), onStartLoading