

### Question 1

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

- `android.permission.CONNECTIVITY`
- `android.permission.INTERNET`
- It doesn't need any special permissions, because all Android apps are allowed to connect to the internet.

Ans : `android.permission.INTERNET`

### Question 2

How does your app check that internet connectivity is available?

In the manifest:

- request `ACCESS_NETWORK_STATE` permission
- request `ALL_NETWORK_STATE` permission
- request `NETWORK_CONNECT` permission

In the code:

- Wrap the code to connect to the internet in a `try/catch` block, and catch `NO_NETWORK` errors.
- Use `ConnectivityManager` to check for an active network before connecting to the network.
- Present a dialog to the user reminding them to make sure that internet connectivity is available before they attempt to connect to the internet.

Ans :

- Request `ACCESS_NETWORK_STATE` permission
- 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 `AsyncTaskLoader` subclass. The `AsyncTaskLoader` must implement `LoaderManager.LoaderCallbacks`.
- In the `Activity` that displays the results of the task. The `Activity` must implement `LoaderManager.LoaderCallbacks`.
- In a `Utility` class that extends `Object` and implements `LoaderManager.LoaderCallbacks`.

Ans: In a `Utility` class that extends `Object` and implements `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, but keeps running. A running `AsyncTaskLoader` becomes disconnected from the activity and stops running, preserving system resources.
- 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.
- A running `AsyncTask` becomes disconnected from the activity, but keeps running. A running `AsyncTaskLoader` automatically reconnects to the activity after the device rotation. The activity displays the results.

Ans : 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.
- In `onCreateLoader()` in the activity, create an instance of the `AsyncTaskLoader` subclass. In the loader's `init()` method, perform initialization tasks.
- In the `Activity`, implement `initLoader()` to initialize the loader.
- Perform initialization tasks for the loader at the start of `loadInBackground()` in the `Loader`.

Ans : 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?

Ans:

- `onStartLoading`
- `loadInBackground`