Document that contains:

* **(5 Points)** The various states that an app can enter on your platform of choice
* **(5 Points)** The various states that you must consider for your app, why you must consider it, and what must happen in each state.

Ans 1. The various states an Android app can go through are:

* **onCreate()**: The activity is created. This is where you set up essential components, like the user interface.
* **onStart()**: The activity becomes visible to the user. Although visible, it may not yet be ready for user interaction.
* **onResume()**: The activity is in the foreground and interacts with the user. This is typically where animations or exclusive processes run.
* **onPause()**: Called when another activity takes focus. Here, the activity partially obscures but remains visible. We should release or pause exclusive resources (e.g., camera).
* **onStop()**: The activity is no longer visible. It’s in the background and might be killed by the system to free resources.
* **onDestroy()**: Called before the activity is destroyed. This is where cleanup of any remaining resources should happen.
* **onRestart()**: Optional stage for when an activity, after stopping, is restarted before it’s created again (e.g., user returns to the app).

Ans 2. The various states that needs to be taken care for my Notes app are as follows:

* **onCreate():** The app should be loaded properly in this state, so that once the onResume() state is reached, the user can interact with it seamlessly. As there will be no notes, the null case needs to be handled properly.
* **onPause():** In case the user was in the middle of writing a new note, the user information needs to be saved in onPause() so that the user can come back to it. This is handled in app by rememberSaveableState.
* **onStop():** The notes which were saved can be saved into memory for retention, so that the user can come back to the notes after user has closed off the app.