1. **What is R.java file?**

* Android R.java is an auto-generated file by Android Asset Packaging Tool that contains resource IDs for all the resources of res/ directory.
* If you create any component in the activity\_main.xml file, id for the corresponding component is automatically created in this file. This id can be used in the activity source file to perform any action on the component.

1. **What is activity and activity lifecycle?**

* An activity is the single screen in android. It is like window or frame of Java
* By the help of activity, you can place all your UI components or widgets in a single screen.
* Life methods describes how activity will behave at different states. There are 7 methods of life cycle
  + 1. **onCreate**:-called when activity is first created
    2. **onStart**:-called when activity is becoming visible to user
    3. **onResume**:-called when activity will start interacting with the user
    4. **onPause**:-called when activity id not visible to the user
    5. **onStop**:-called when activity is no longer visible to user
    6. **onRestart**:-called after your activity is stopped, prior to start
    7. **onDestroy**:-called before the activity is destroyed

1. **What is fragment and fragment lifecycle?**

* In Android, the fragment is the part of Activity which represents a portion of User Interface (UI) on the screen.
* Each fragment has its own lifecycle but due to the connection with the Activity it belongs to, the fragment lifecycle is influenced by the activity’s lifecycle.
* Methods of fragment life cycle are explained below
  1. **onAttach:-** This method will be called first, even before onCreate(), letting us know that your fragment has been attached to an activity.
  2. **onCreateView:-** To draw a UI for the fragment, a View component must be returned from this method which is the root of the fragment’s layout
  3. **onViewCreated:-** This is particularly useful when inheriting the onCreateView() implementation but we need to configure the resulting views, such as with a List Fragment and when to set up an adapter
  4. **onActivtityCreated():-**This will be called after onCreate() and onCreateView(), to indicate that the activity’s onCreate() has completed. If there is something that’s needed to be initialised in the fragment that depends upon the activity’s onCreate() having completed its work then onActivityCreated() can be used for that initialisation work
  5. **onStart():-**This method is called once the fragment gets visible
  6. **onPause():-**The system calls this method as the first indication that the user is leaving the fragment
  7. **onStop():-**Fragment going to be stopped by calling onStop()
  8. **onDestroyView:-** This is the counterpart to onCreateView() where we set up the UI. If there are things that are needed to be cleaned up specific to the UI, then that logic can be put up in onDestroyView()
  9. **onDestroy:-** It is called to do final clean up of the fragment’s state but not guaranteed to be called by the Android platform.
  10. **onDetach():-**It’s called after onDestroy(), to notify that the fragment has been disassociated from its hosting activity