**Attempt any 2 Questions!!!**

1. Create a login form with following design using constraint layout – use **Guidelines** and **Barriers** suitable for every device screen.

(Guidelines will make design adaptable to device screens of different sizes.

Barrier will make elements non-overlapping in different scenarios.)

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|  |

Name

|  |
| --- |
|  |

Email

|  |
| --- |
|  |

Age

|  |
| --- |
|  |

Password

Submit

Now On click of **Submit** button send data to second activity and display user’s name and age.

1. Create a data source of different country names and display it in a grid using Recycler view.

Now when user clicks on a particular country, open other activity showing the country map and image and some related information in another activity.

1. Create a local bounded service in android which sorts the integer array.

Then create an integer ArrayList in activity and consume that service to sort the given ArrayList. (*Using a worker thread from within the service is highly recommendable or you can use Java 8 Stream API.)*