File-system stack use-case

Task A:

You are a C++ developer in a company, and the integrator provide for you a file-system with the following characteristic:

1. **/etc** directory is a read-only directory.
2. **/data** directory is a read-write directory.

And for your C++ program in-order to work, you should push some configuration file in the **/etc** directory, but you don't have the write permission for that, and you want to test your C++ program in-order to deliver it in time,
You asked the integrator to give you a root-file system with **/etc** directory in **read-write** mode, but he does not have time for that. Fortunately you are a Linux geek and you heard that there is something called file-system overlay that can save your time.

You task:

1. Read about overlay and write the steps you need in-order to push the confirmation file in **/etc,** so that your application can work normally.

Hints:

1. Overlay

Task B:

What is the linux behavior in the following situations ?

Context:

You need to mount a file system onto a directory that already contains some files.

Challenge:

- What is the linux behavior in this case ?

Context:

You are tasked with mounting a new file system onto a directory that already contains files and possibly other data.

Challenge:

- What is the linux behavior in this case ?