Question 2.1:

Three ways to check if process is exists:
1. kill(pid,0), send signal to the process.
2. ps, show properties of process if exists (use with -p)
3.top, show all process so all we need to do is search the wanted process.

First method has the follow adventeges:
its reliable because we can be sure that process is really exists at the moment because it replay to our signal .
First method has the follow disadventeges:
we wont always have permission to the wanted process.

Second method has the follow adventeges:
its quick easy and convenient.
Second method has the follow disadventeges:
if process stoped right after the action, we wont be able to know that and we will think this process exists but actually it isnt.

Third method has the follow adventeges:
its quick easy and convenient.
Third method has the follow disadventeges:
if there are a lot of process it will be hard to find the wanted process.