* **Reverse engineering IoT**: Why can reverse engineering be used to improve cloud-based information technology (IT) systems?

Cloud based systems can still be hacked. Are there still security vulnerabilities

that will need to be found? The bigger the cloud gets the more vulnerabilities the cloud

will likely be had. It may also be the case that the longer these vulnerabilities are open to

hackers, the longer they can be in the system.

* **Patching**: How is reverse engineering used to patch cloud-based IT systems?

The hackers could use reverse engineering to attack the cloud, but there could also

be scenarios where programmers would use reverse engineering to patch the cloud up.

This is where knowing where the damage could be done and using it for good to restore

the system in place.

* **Vulnerability**: Why is it that so many IoT devices are already infected with malware and many more are vulnerable to exploitation?

In a world where everything is connected to the internet, it becomes impossible to

stay up to date with all of the latest hacker tricks. This makes it impossible to protect any

software from all attacks, even for a short time. An example of a child could be used

here. When the child is small and does not have a great immune system in place, the child

could contract a virus very early. As it grows it develops an immune system that protects

from various viruses.

In an area where there is so much demand for new software, there is never enough

time to thoroughly test the software either. This can also lead to vulnerabilities. This is

also why in gaming there are more beta versions coming out, and multiple updates per

year.

* **Impact**: How does reverse engineering impact new IT technologies, such as IoT and cloud computing?

It makes it harder to reverse engineer software unless you have an idea where to

look. However, this could be a blessing on keeping a job if you stay diligent. There are

always companies and governments looking for reverse engineering programmers to both

fix vulnerabilities and exploit them as well.

* **Future**: Are there other new technologies that you can think of that either already use reverse engineering or should consider using reverse engineering in the future?

With so many technologies connected to the internet, like google homes or other

smart devices, there are lots of possibilities. There are a lot of infrastructure tools use, gas

lines, electric meters, etc. connected and could be exploited by the hackers wanting to.