SOFTWARE ENGINEERING

Lab 5

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Problem Statement 1:

As a manager of MNC, keeping in mind the personal, business and professional ethics I think I would inform the client about what exactly might be the bug in the product and how the company could tackle the situation.

The most important aspect of any client and employer relationship is the transparency of communication and delivery of the product. The Employer Team should be strong is every aspect such as optimisation and even debugging. But many at times due to minor reasons, the developers might overlook some minute error which could later have a major impact in deploying the product. Some of the ways to develop a defect-free product without jeopardizing the relationship with the client are :

* **Designing the code for simplicity and reliability –** A clean well-structured design simplifies producing reliable code. Finding and fixing a bug is fast and saves time and money.
* **Trace every code when written –** Using debuggers to trace every like of code and trying to predict the outcome before each line is executed.
* **Review code by Peers and fellow Programmers –** allows more than one engineer to perceive the code while it is still easy to change. Encouraging cross-training and collaboration helps delivery of a better optimised code.
* **Build Automated QA into the code –** Automated tests help utilise the power of modern computing power and also human error.
* **Build and test daily –** Updating the code with feedback loops help the developer better understand the product and future estimates.
* **Use Automated Checking –** Set complier’s warning level to the maximum. Use memory trace subsystems and other tools.