PEN: 180840131009

PRACTICAL - 1

Study of various Problem domains and Identify Problem definition.

Practical - 1.1

Aim: Provide Problem Definition.

1. **Problem Definition**:

In this digital age, we tend to have a lot of online accounts on different platforms, each with a password we need to remember. On top of that, we are told to use "strong" passwords that are a combination of mixed case letters, numbers and symbols, use a password only once, and to change them all every three months. We are also told not to store passwords just anywhere because of the security risk.

Now, it becomes extremely difficult to remember so many different complicated passwords. So what can be done to minimize the complexity while maintaining security? Well, there is a software solution to this problem. A 'Password Manager'.

A password manager is a software application that is used to store and manage the passwords that a user has for various online accounts. It requires creation of a "master" password that gives you access to your account. Some additional features such as automatic generation of strong passwords, 2-step authentication, automatic form filling feature and synchronization across all of your devices can also be included.

On the other hand, there are some caveats in a password manager like if your master password gets compromised, the attacker may have access to all your passwords. However, these risks are believed to be less than the much greater risk of poorly managed passwords.

Conclusively, forgetting and resetting passwords can waste hours of your time, and using identical or weak passwords exposes you to major risk. So, it is a wise decision to use a password management app.

2. Project Title: Password Manager