# ITE231 Assignment 3

## 1)What are different types of Storage?

Ans: Different Storage Types:

* Electronic
* Magnetic
* Optical
* Mechanical

2)what are Different Disk Types?

Ans: The different disk types are :

* Hard Drive (HDD)
* Solid State Drive (SDD)
* Optical Disks

3)What are the advantages and Disadvantages of SSD and HDD drive?

Ans:

| **Characteristic** | **SSD** | **HDD** |
| --- | --- | --- |
|  |  |  |
| Startup time | Nearly instantaneous (Advantage) | Sign up can take few seconds (Disadvantage) |
| Fragmentation | Very small .  Fragmentation makes computer work harder and perform slower (So Disadvantage) | Defragmentation is required for best performance. Defragmentation can improve data access performance for HDDs that store information on disk platters (So Advantage for HDD) |
| Temperature control | Tolerates high temperature  (Advantage) | Temperature should stay below 95 or additional cooling is required, so cannot tolerate high temperatures. (Disadvantage) |
| Noise | Nearly silent (Advantage) | Vary between models, thus noise is created in the case of HDD(Disadvantage) |
| Susceptibility to failure | Extremely resistant to shock  (Advantage) | susceptible to shock and vibrations  (Disadvantage) |
| Installation | not sensitive to location or position (Advantage) | Must be mounted for various reasons  (Disadvantage) |
| Reliability and expected lifetime | Not as likely to experience mechanical failure (Advantage) | Potential for mechanical failure  (Disadvantage) |
| Data transfer rates | Delivers consistent read/write speed  (Advantage) | Slower response time  (Disadvantage) |
| Power | Flash based on average requires half the power of an HDD (Advantage) | Anywhere from 0.35 to 20 watts  (Disadvantage) |
| Cost | More expensive (Disadvantage) | Less expensive (Advantage) |