**REDUNDANT ARRAY OF INDEPENDENT DISKS**

Need: on disk failure no data would be lost

There are 5 types of raids

RAID 0 :

RAID 1

RAID 5

RAID 1O

**RAID 0 :** Diagram

Description automatically generated

All data lost

Speed is faster

**RAID 1:**

One disk would have a duplicate copy

Diagram

Description automatically generated

**RAID 5:**

* Most common set up that is used
* Uses 3 or more disks
* It is fast and it can store a large amount of data
* Data is not duplicated. However, it is striped across multiple disks along with parity.

Parity: Used to rebuild the data in case of disk failure

Note: equivalent of 1 entire disk would be used to store parity

Graphical user interface

Description automatically generated

**RAID 10**

Combining raid 1 and raid 0 together

* Benefits from the fault tolerance of raid 1 and the speed of Raid 0

Note : You can only use 50% of the disk for storage

Graphical user interface

Description automatically generated