

3. Hashing algorithms

A mathematical formula used to perform a calculation on the `record key`. The result of the calculation gives the address where the record should be found. More complex hashing algorithms are used in the encryption of data.

Two ways of dealing with collision:

`open hash` : the record is stored in the next free space.

`close hash` : an overflow area is set up and the record is stored in the next free space in the overflow area.

Past-paper questions

1. (https://haoran-jie.github.io/Notes/ALCS/Chapter13.2_FileOrganisationAndAccess/9608-s21-q2)(<https://s2.loli.net/2023/02/04/3tiowSlkN9pT5cu.png>)](<https://s2.loli.net/2023/02/04/3tiowSlkN9pT5cu.png>)

```
FUNCTION hash(BookingID: INTEGER) RETURNS INTEGER
    RETURN BookingID%100000 + 3
ENDFUNCTION
```