DATA REPRESENTATION

4 ways to represent data

Decimal -> regular numbers, 10 ^ 0, 10 ^ 1, 10 ^ 2

binary -> 0 and 1, power of 2, 210, 2^1, 2^2...

-> number that computer understands

Octal -> power of 8, from 0 to 7

-> 1 octal is 3 binary digits

hexadecimal -> power of 16, from 0 to 15

-> 1 hex is 4 binary digits

How to convert from one to another

FILE PERMISSIONS

umask - if run without arguments, it displays the default permission for newly-created files/directories

* can be run with/without argument
* argument will be the permission in octal form

chmod

symbolic method -> chmod ugo+w filename

u -> user

g -> group members

o -> others

+, - -> to add or remove that specific permission

1. Symbolic method

drwxrw--w-

* it is a directory,
* user has full permission (read/write/execute)
* group members have read and write only (no execute permission)
* others have write permission only

2. Octal (numeric/absolute) method

chmod 777 filename

* ﻿first digit is the permission for user
* second digit is the permission for others in the group
* third digit is the permission for all others
* has to be between 0 and 7

Calendar

Description automatically generated

Graphical user interface, text

Description automatically generatedA screenshot of a computer

Description automatically generated with medium confidence