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| **BASIC PERMISSION** | **EFFECT ON FILES** | **EFFECT ON DIRECTORIES** | **PRACTICAL EFFECT ON DIRECTORIES** |
| **r (read)**  **mode = 4** | 1. Files can be read. | 1. Contents of the directory (only filenames without any other details) can be listed. | 1. If only this permission is granted then only file names can be listed without any other details like permissions and timestamps.  2. If only this permission is granted **files cannot be accessed**.  3. It is the permission to **list directory contents**.  4. Can be used to just get names of files in directories by using “**ls -l DIR**” command.  5. Tab completion will work as it is permission to list filenames. |
| **w (write)**  **mode = 2** | 1. Files can be changed. | 1. Any file or directory in the parent directory can be created or deleted as contents of a directory are filenames not the actual file contents. | 1. Files can be created or deleted by any user having write permission on the parent directory.  2. Files can be deleted by the user regardless of the ownership or permissions of the files.  3. It is the permission to **modify directory contents**.  4. This property can be **limited by setting sticky bit**. |
| **x (execute)**  **mode = 1** | 1. Files can be executed as commands. | 1. Contents of the directory can be accessed (dependent on the permissions of the files in the directory). | 1. File names cannot be listed.  2. Files can be accessed if the exact file name is known.  3. Files can be accessed only if the user has permission to read the files.  4. It is the permission to **access directory contents**.  5. If only this permission is granted then the user cannot list the files contained in a directory but can **access a file** if the user knows the filename and also owns it.  6. Tab completion will not work as it is not the permission to list filenames. |

**LINUX BASIC FILE PERMISSIONS**