Open ( ):

The **open**() system call opens the file specified by *pathname*.

Pathname- A pointer to a string that specifies the file to be opened. This can be either an absolute or a relative path.

Flags- There are three access mode in flags a) for read only we use O\_RDONLY

b) for write only we use O\_WRONLY c) for both we use O\_RDWR.

If we want to create file then we use O\_CREAT and when we use it then we need more .More is used to specifies the permissions to use in case a new file is created.It used some file permission like S\_IRUSR- which is used for read permisssion.S\_IWUSR-used for write permission.

Close ():

closes a file descriptor, so that it no longer refers to any file and may be reused.

Read () :

attempts to read up to *count* bytes from file descriptor *fd* into the buffer starting at *buf*.

**fd**: The file descriptor from which to read data. This is an integer value obtained from a previous call to open, socket, or other functions that return a file descriptor.

**buf**: A pointer to a buffer where the read data will be stored.

**count**: The maximum number of bytes to read. This specifies the size of the buffer.

\*\*\* File Descriptor- In Linux and other Unix-like operating systems, a **file descriptor** is a low-level integer identifier used to access files or other input/output (I/O) resources such as sockets, pipes, or terminals.

0 is used for standard input.(Stdin)

1 is used for standaed output.(stdout)

2 is used for standard error(Stderr)

Write():

**write**():

writes up to *count* bytes from the buffer starting at

buf to the file referred to by the file descriptor *fd*.

**fd**: The file descriptor to which data will be written. This is an integer value obtained from a previous call to open, socket, or other functions that return a file descriptor.

**buf**: A pointer to the buffer containing the data to be written. This is typically an array of bytes.

**count**: The number of bytes to write from the buffer.

Socekt():

creates an endpoint for communication and returns a file

descriptor that refers to that endpoint. The file descriptor returned by a successful call will be the lowest-numbered file descriptor not currently open for the process.

**domain**: Specifies the communication domain (e.g., AF\_INET for IPv4, AF\_INET6 for IPv6).

**type**: Specifies the socket type (e.g., SOCK\_STREAM for TCP, SOCK\_DGRAM for UDP).

**protocol**: Specifies a particular protocol (usually set to 0 to choose the default for the type).

Bind:

It is associated with socket with local address and port.

**sockfd**: The socket file descriptor.

**addr**: A pointer to a sockaddr structure that specifies the address and port.

**addrlen**: The size of the address structure.

Connect:

It is used to connect a socket to a remote address.

**sockfd**: The socket file descriptor.

**addr**: A pointer to a sockaddr structure that specifies the remote address and port.

**addrlen**: The size of the address structure.