

# **Exec family of functions**

- These `exe()` family of functions replaces current process image with a new process image.
- They are responsible to run a new process with the same existing PID.

```
int execl(const char *pathname, const char *arg, ...);
```

```
int execlp(const char *filename, const char *arg, ...);
```

```
int execv(const char *pathname, char *const argv[]);
```

```
int execvp(const char *filename, char *const argv[]);
```

- None of the above returns on success; all return `-1` on error

- Most of the `exec()` functions expect a pathname as the specification of the new program to be loaded. However, `execlp()` and `execvp()` allow the program to be specified using just a filename.

Ex: `execl("/bin/ls", "ls", "-l", "-a", (char *)NULL);`

`execlp("ls", "ls", "-l", "-a", (char *)NULL);`

`char *arg[]={"/bin/ls", "-l", "-a", NULL};`

`execv(arg[0], arg);`

`char *arg[]={"ls", "-l", "-a", NULL};`

`execvp(arg[0], arg);`