OS Lab 6:

Process Creation & Execution

exec prototype:

int exec(“command name”)

execlp prototype:

int execlp(char \*path, char\* command, char \*argv0, char\* argv1, --- ,char \*argvn, NULL )

exec does not create image process but just completely replace the image with command given etc,

exec return -1 in case of failure but does not return in case of successful execution.

For finding the path of bulit-in commands, use which command.

Prototype:

which command\_name

prototype:

int wait(int \*states)

wait system call is used to wait for the child process termination.

wait return -1 in case of failure but return child pid in case of successful execution.

wait will failed if child process does not exit.

If you have multiple children then wait return for whoever the first child terminates, but if you do not want parent to terminate first, execute multiple wait command through loop.

Process fan:

main(){

for(int i=0; i<4; i++)

{ X = fork();

If (x ==0 )

break;

}

If(x>0){

for(int i=0; i<4; i++){

int r = wait(NULL);

}

}

}

Process Chain:

main(){

for(int i=0; i<4; i++)

{

X =fork();

If (x>0)

Break;

}

If(x>0)

wait(NULL);

}