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forktest.c
Shared ~/Shared/Project_1

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```
1 #include <stdio.h>
2 #include <unistd.h>
3 #include <sys/wait.h>
4
5
6
7 int main()
8 {
9     printf("Parent: Process started\n");
10    printf("Parent: Forking a child.\n");
11
12    if (fork() != 0) {
13        // Parent
14        int status;
15        printf("Parent: Wait for child to complete.\n");
16        // waitpid(pid, &status, options)
17        // pid == 0 means wait for child whose pid == 0
18        // group-id = its caller group-id
19        // pid == -1 means wait for child whose group-id == |pid|
20        // whose group-id == |pid|
21        waitpid(-1, &status, 0); // equivalent to wait(&status);
22        printf("Parent: Terminating.\n");
23    }
24    else {
25        // Child
26        printf("Child: Process started.\n");
27        printf("Child: Start 10 second idle: ");
28
29        int i;
30        for (i = 10; i >= 0; i--) {
31            printf("%3d", i); fflush(stdout);
32            sleep(1);
33        }
34        printf(" done!\n");
35        printf("Child: Terminating.\n");
36    }
37 }
```

user@Ubuntu22: ~/Shared/Project_1

```
user@Ubuntu22:~/Shared/Project_1$ gcc forktest.c -o forktest
user@Ubuntu22:~/Shared/Project_1$ ./forktest
Parent: Process started
Parent: Forking a child.
Parent: Wait for child to complete.
Child: Process started.
Child: Start 10 second idle: 10  9  8  7  6  5  4
Child: Terminating.
Parent: Terminating.
user@Ubuntu22:~/Shared/Project_1$ man gcc
user@Ubuntu22:~/Shared/Project_1$
```

```
user@Ubuntu22: ~/Shared/Project_1
user@Ubuntu22:~/Shared/Project_1$ gcc forktest.c -o forktest
user@Ubuntu22:~/Shared/Project_1$ ./forktest
Parent: Process started
Parent: Forking a child.
Parent: Wait for child to complete.
Child: Process started.
Child: Start 10 second idle: 10 9 8 7 6 5 4 3 2 1 0 done!
Child: Terminating.
Parent: Terminating.
user@Ubuntu22:~/Shared/Project_1$ man gcc
user@Ubuntu22:~/Shared/Project_1$
```

sf_CSEN383

Shared

VBox_GAs_7....

Other Locations

"forktest.c" selected (991 bytes)