

```

#include <fcntl.h>
#include <stdio.h>
main()
{ int fd; /* file descriptor */ int pid; /* process id */
  char buf[10]; /* buffer to hold file data */
  if ( (fd = open("a.txt", O_RDONLY) ) < 0 )
  {
    printf("file open error\n"); exit(1);
  }
  read(fd, buf, 10);
  printpos("Before fork", fd);
  if ( (pid = fork() ) < 0 )
  {
    printf("fork error\n"); exit(1); }
  else if ( pid == 0 ) /* child */
  {
    printpos("Child before read", fd);
    read(fd, buf, 10);
    printpos("Child after read", fd);
  }
  else /* parent */
  {
    wait( (int *)0 );
    printpos("Parent after wait", fd);
  }
}

```

```
printpos(string, filedes)
char *string;
int filedes;
{
    long pos, lseek();
    if ( (pos = lseek(filedes, 0L, 1)) < 0L)
        printf("error: lseek failed\n");
    printf("%s: %ld\n", string, pos);
}
```

<결과>

Before fork : 10

Child before read : 10

Child after read : 20

Parent after wait : 20

## 좀비프로세스 발생함

```
#include <stdlib.h>
#include <stdio.h>
main()
{
    int child;
    if((child=fork())==0)
    {
        printf("child PID %d\n", getpid());
        pause(); ← 어떠한 신호가 오기전까지는 중단 (잠아킴)
    }
    /* 부모 */
    printf("child PID %d\n", child);
    exit(child); ← 부모 죽음
}
```

해결: kill PID