

CSI 402 – Systems Programming – Handout 10.2

Using lseek to check whether stdin supports the seek operation

```
/* Program to check whether seek operation is permissible on stdin. */

/* Note: It may be possible to do seek on stdin because of redirection. */

#include <stdio.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <unistd.h>

int main(void) {

    if (lseek(STDIN_FILENO, 0, SEEK_CUR) == -1) {
        printf("Cannot do seek.\n"); fflush(stdout);
    }
    else {
        printf("Seek is possible.\n"); fflush(stdout);
    }

    return 0;
} /* End of main. */
```

Suppose the executable version of the above program is called `scheck`. Some outputs generated by executing the program are shown below. (In the following, `%` denotes the Unix prompt. It is assumed that there is a file called `f1.txt` in the directory from which the `scheck` command is being executed.)

```
% scheck < f1.txt
Seek is possible.

% cat f1.txt | scheck
Cannot do seek.
```