

Reading from a Text File

To read from a text file:

1) First you need to open the file for reading:

```
FILE *input_file=fopen("data.txt", "r"); /* opens file data.txt for reading */
```

2) Read data from the file:

- **fscanf()** can be used. **fscanf()** reads from the input file in the same way **scanf()** reads from the standard input stream (keyboard).
- **fscanf()** needs one more argument which specifies the input file.

```
fscanf(input_file,"%d", &n ); /* reads the next integer from the file specified by  
input_file and stores it in the integer variable n */
```

To read more integers you may use the above statement in a loop. The integers have to be separated by white spaces.

If you have read some values from the file and you want to start reading again from the beginning use first:

```
rewind(input_file); //moves the file position pointer at the beginning of the file
```

then read the values with **scanf()**

3) When you are done you have to close the file:

```
fclose(input_file);
```

- **#include <stdio.h>** for file I/O

Writing into a Text File

To write into a text file:

1) First you have to open the file for writing.

```
FILE *output_file=fopen("output.txt", "w"); /* opens file output.txt for  
writing; if the file does not exist it is created; if it  
does exist its contents is wiped out. */
```

2) Write the data into the file:

- **fprintf()** can be used. **fprintf()** writes into the output file in the same way **printf()** writes into the standard output stream (on the screen).
- **fprintf()** needs one more argument which specifies the output file.

```
fprintf(output_file,"%d\n", n ); /* prints integer n followed by newline */
```

3) When you are done you have to close the file.

```
fclose(output_file);
```

- **#include <stdio.h>** for file I/O