

# seekg(), tellg(), seekp(), tellp()



## fstream Methods for Random Access

- **tellg()** - returns (in bytes) location of file pointer in input file
- **tellp()** - returns (in bytes) location of file pointer in output file
- **seekg()** - repositions current file pointer in input file
- **seekp()** - repositions current file pointer on output file
- If both in and out, use tellg() and seekg()

In C++ we have a get pointer and a put pointer for getting (i.e. reading) data from a file and putting (i.e. writing) data on the file respectively.

seekg() is used to move the get pointer to a desired location with respect to a reference point.

Syntax: `file_pointer.seekg (number of bytes ,Reference point);`

Example: `fin.seekg(10,ios::beg);`

tellg() is used to know where the get pointer is in a file.

Syntax: `file_pointer.tellg();`

Example: `int posn = fin.tellg();`



seekp() is used to move the put pointer to a desired location with respect to a reference point.

Syntax: `file_pointer.seekp(number of bytes ,Reference point);`

Example: `fout.seekp(10,ios::beg);`

tellp() is used to know where the put pointer is in a file.

Syntax: `file_pointer.tellp();`

Example: `int posn=fout.tellp();`

The reference points are:

`ios::beg` – from beginning of file

`ios::end` – from end of file

`ios::cur` – from current position in the file.

In seekg() and seekp() if we put – sign in front of number of bytes then we can move backwards.

From the examples it is clear that these functions are very much alike.