

# Random File Access

To move the file pointer, use the `.seek()` method.

```
file.seek(position-in-file, whence)
```

- Set whence to 0 to set pointer to the beginning of the file (default).
- Set whence to 1 to set pointer to the current position of the file.
- Set whence to 2 to set pointer to the end of the file

For example

```
file.seek(5, 0)
```

This will move the pointer to position 5 from the beginning of the file

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	J	a	c	k		j	a	c	k	@	t	e	s	t	.	c	o	m
18	P	e	t	e		p	e	t	e	@	t	e	s	t	.	c	o	m
36	J	i	l	l		j	i	l	l	@	s	i	t	e	.	c	o	m

```
file.seek(23, 0)
```

This will move the pointer to position 23 from the beginning of the file

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	J	a	c	k		j	a	c	k	@	t	e	s	t	.	c	o	m
18	P	e	t	e		p	e	t	e	@	t	e	s	t	.	c	o	m
36	J	i	l	l		j	i	l	l	@	s	i	t	e	.	c	o	m

If you want to read from the current position to the end of the line

```
dataInFile = file.readline()
```

If you want to read from the end of the file, you'll need to count backwards from the end of the file, you do this with a negative offset. The `seek()` function with negative offset only works when file is opened in binary mode.

```
f = open("data.txt", "rb")
```

To move the pointer from the end of the file

```
f.seek(-3, 2)
```

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	J	a	c	k		j	a	c	k	@	t	e	s	t	.	c	o	m
18	P	e	t	e		p	e	t	e	@	t	e	s	t	.	c	o	m
36	J	i	l	l		j	i	l	l	@	s	i	t	e	.	c	o	m

← -3   -2   -1

Use `.decode('utf-8')` to convert the binary back to text.

```
datafromfile = f.readline().decode('utf-8')
```