

Fragmentation

//constructor called

buffer[BUF\_SIZE]

\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0
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char\* a=simple\_mem\_manager.allocate\_chars(3);

i	n		\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0	\0
---	---	--	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

char\* b=simple\_mem\_manager.allocate\_chars(7);

i	n		F	r	e	n	c	h		\0	\0	\0	\0	\0	\0	\0	\0	\0	\0
---	---	--	---	---	---	---	---	---	--	----	----	----	----	----	----	----	----	----	----

char\* c=simple\_mem\_manager.allocate\_chars(7);

i	n		F	r	e	n	c	h		c	h	a	p	e	a	u	\0	\0	\0
---	---	--	---	---	---	---	---	---	--	---	---	---	---	---	---	---	----	----	----

simple\_mem\_manager.free\_chars(a);

\0	\0	\0	F	r	e	n	c	h		c	h	a	p	e	a	u	\0	\0	\0
----	----	----	---	---	---	---	---	---	--	---	---	---	---	---	---	---	----	----	----

char\* d=simple\_mem\_manager.allocate\_chars(3)

t	o	p	F	r	e	n	c	h		c	h	a	p	e	a	u	\0	\0	\0
---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	----	----	----

simple\_mem\_manager.free\_chars(b);

t	o	p	\0	\0	\0	\0	\0	\0	\0	c	h	a	p	e	a	u	\0	\0	\0
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char\* e=simple\_mem\_manager.allocate\_chars(8);

Stack would remain the same, not 8 contiguous spots available.

char\* f=simple\_mem\_managers.allocate\_chars(3);

t	o	p	h	a	t	\0	\0	\0	\0	c	h	a	p	e	a	u	\0	\0	\0
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