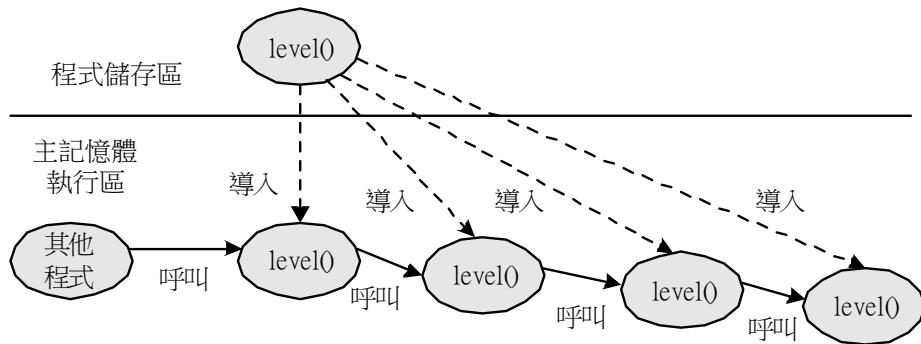


## 遞回函數的流程

所謂呼叫函數，即是將函數的程式碼倒入記憶體空間，再去執行他；某函數被多次呼叫，則導入多次。(函數自己呼叫自己)



範例： $level(n) = 1 * 2 * 3 * 4 * \dots * n$	說明： $total = level(5)$ 的運作程序										
<pre>static int level(int k) {     if (k &lt;=1)         return 1;     else         return (k* level(k-1)); }</pre>	<p>k * level(k-1)</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>k = 5</td> <td>5 * level(4)</td> </tr> <tr> <td>k = 4</td> <td>4 * level(3)</td> </tr> <tr> <td>k = 3</td> <td>3 * level(2)</td> </tr> <tr> <td>k = 2</td> <td>2 * level(1)</td> </tr> <tr> <td>k = 1</td> <td>1</td> </tr> </table>	k = 5	5 * level(4)	k = 4	4 * level(3)	k = 3	3 * level(2)	k = 2	2 * level(1)	k = 1	1
k = 5	5 * level(4)										
k = 4	4 * level(3)										
k = 3	3 * level(2)										
k = 2	2 * level(1)										
k = 1	1										

次數	level(k)	K	K <=1	執行動作	返回
1	level(5)	5	no	return (5 * level(4))	$5 * 24 = 120$
2	level(4)	4	no	return (4 * level(3))	$4 * 6 = 24$
3	level(3)	3	no	return (3 * level(2))	$3 * 2 = 6$
4	level(2)	2	no	return (2 * level(1))	$2 * 1 = 2$
5	level(1)	1	yes	return 1	1