


Algorithmics	Student information	Date	Number of session
	UO:300895	20-3-26	6
	Surname: Franco Martinez	 Escuela de Ingeniería Informática Universidad de Oviedo	
	Name: Ivan		



## Activity 1. [Map Colouring]

In the best case (when there is only one node connected to another), the algorithm will have a complexity of  $O(n)$ . In the worst case (when every node is connected to all other nodes), the algorithm will have a complexity of  $O(n^2)$ .

n	t Colouring
8	0,0035
16	0,0051
32	0,0113
64	0,0217
128	0,0249
256	0,0508
512	0,0952
1024	0,25
2048	0,5557
4096	1,2227
8192	2,5897
16384	6,9671
32768	14,8136
65536	28,5356

The complexity match with the times obtained