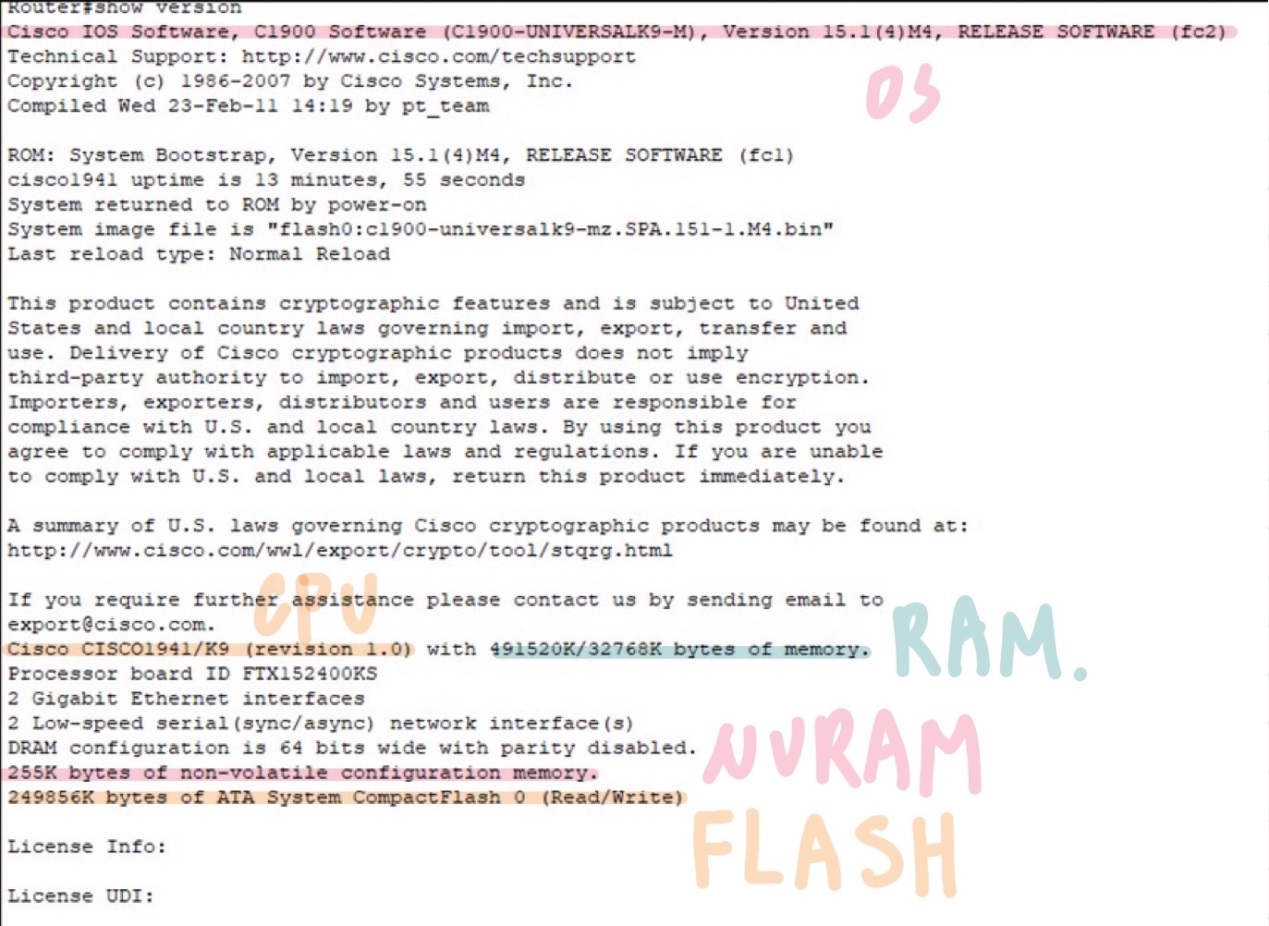
**網路概論 作業四**

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2022/01/10

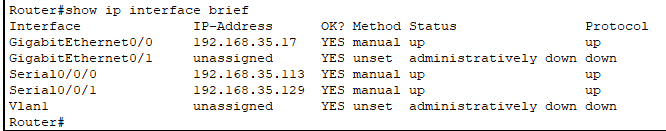
**Q1:利用R1#show version記錄所用router 之下列資料：CPU型號、memory大小、NVRAM大小、Flash memory大小、作業系統版本。**

* CPU型號: Cisco CISCO1941/K9(revision 1.0)
* memory大小: 491520K/32768K
* NVRAM大小: 255K bytes
* Flash memory大小: 249856K bytes
* 作業系統版本: Cisco IOS Software, C1900 Software (C1900-UNIVERSALK9-M), Version 15.1(4)M4, RELEASE SOFTWARE (fc2)



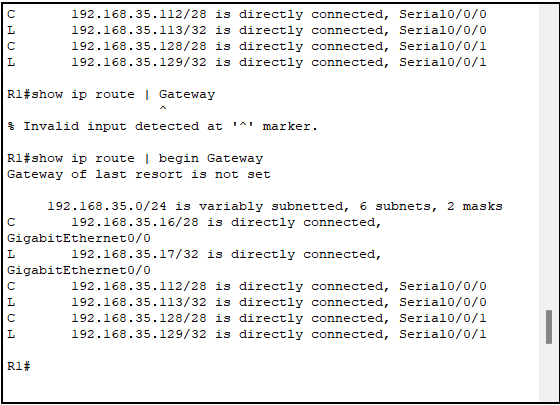
**Q2:利用R1#show ip interface brief記錄R1各interface 目前設定狀況。**

R1:

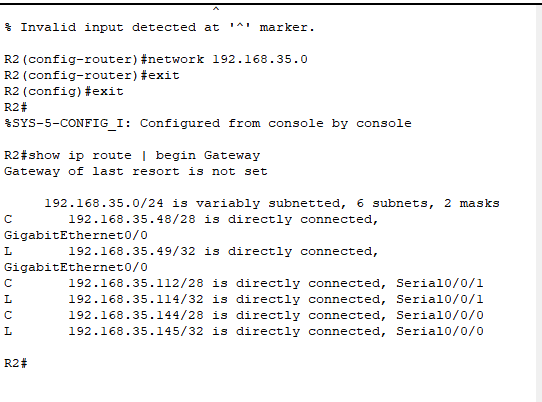


**Q3:觀看並記錄三台路由器個別的routing table。**

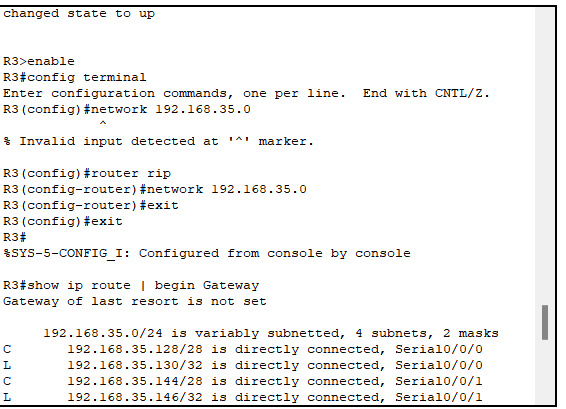
R1:



R2:

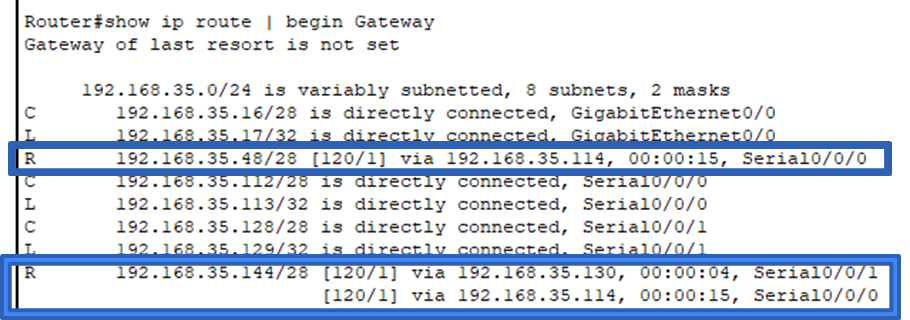


R3:

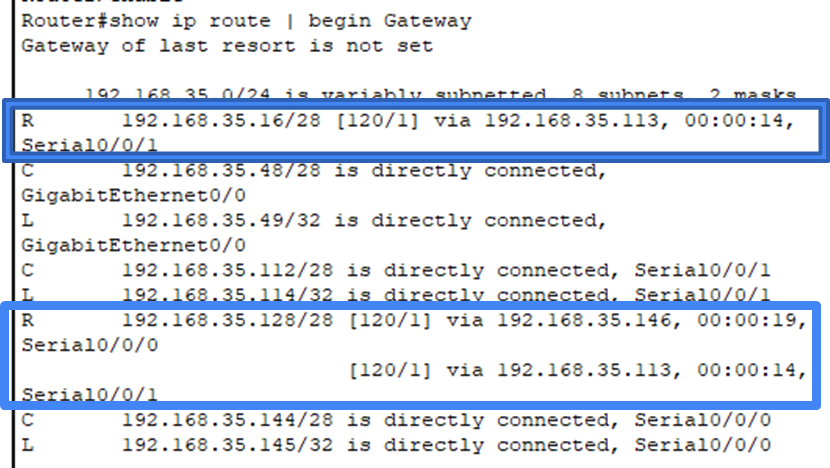


**Q4:等待約一分鐘後，觀看並記錄三台路由器個別的routing table，和Q3中所記錄的有無不同？**

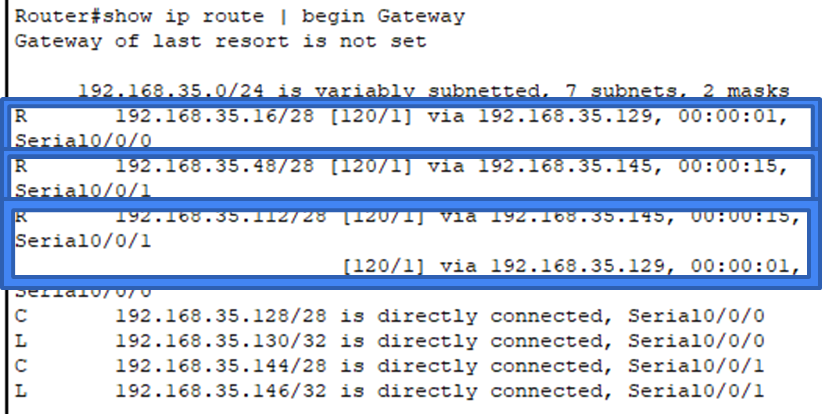
R1:



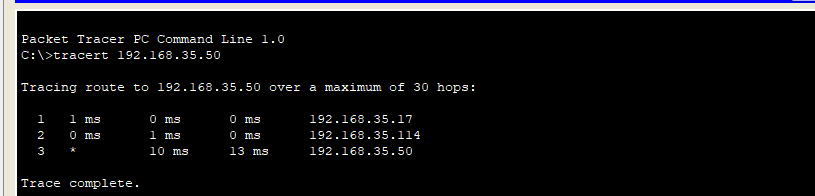
R2:



R3:

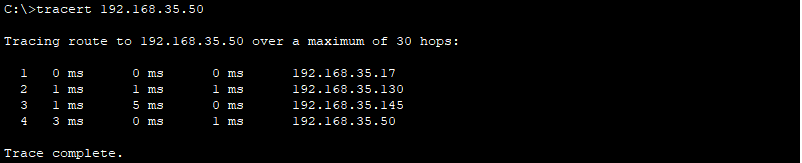


**Q5:點選PC1，在Desktop分頁中，點選Command Prompt，鍵入tracert<PC2’s IP>，記錄目前PC1到PC2之路徑所經過之IP address，該路徑共經過幾個hop。**



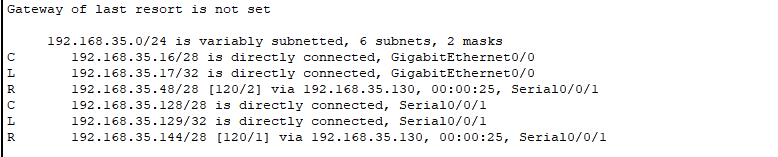
PC1 -> R1 -> R2 -> PC2

**Q6:到R1的s0/0/0 port，輸入shutdown指令來模擬R1與R2間link斷線的狀況，等待約一分鐘，觀看並記錄三台router上個別的routing table，是否有任何改變。從PC1再次tracert<PC2’s IP>，記錄目前PC1到PC2之路徑，和先前有無不同。**

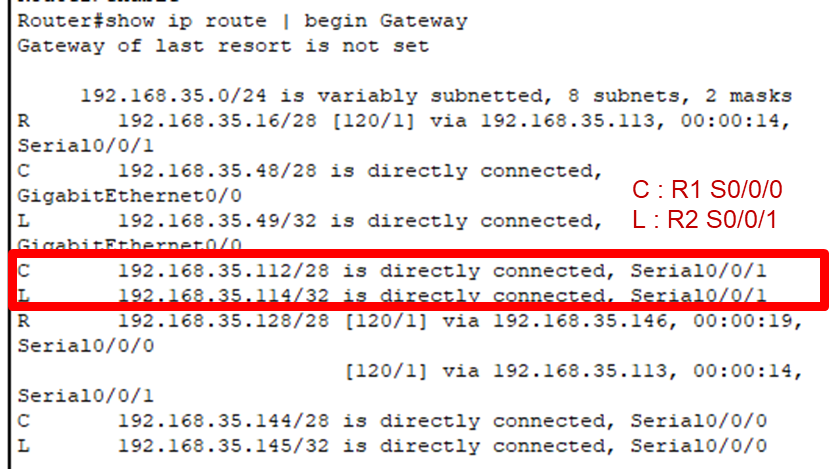


PC1 -> R1 -> R3 -> R2 -> PC2

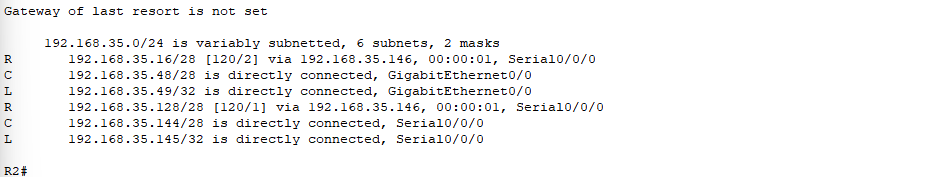
R1:



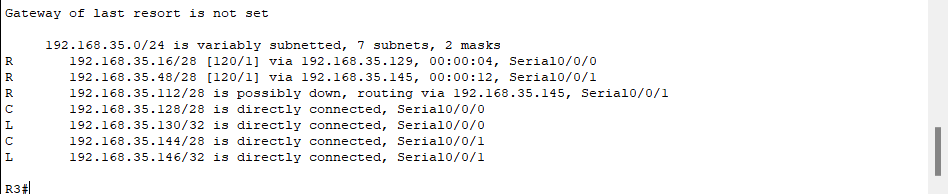
R2:



(R1到R2斷連)

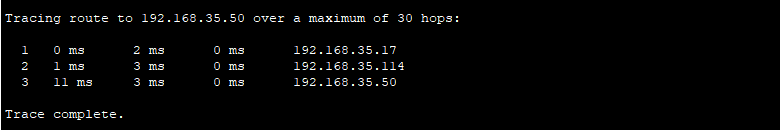


R3

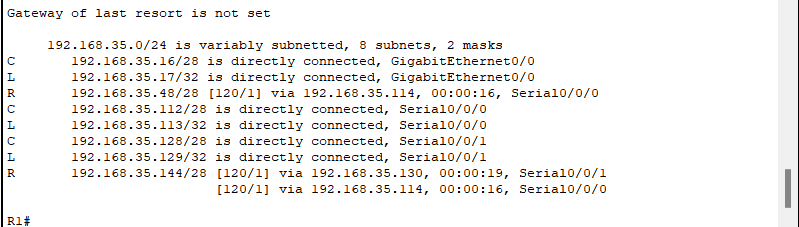


**Q7:到R1的s0/0/0 port，輸入no shutdown指令將R1與R2間link恢復連線，等待約一分鐘，觀看並記錄三台router上個別的routing table，是否又有任何改變。從PC1再次tracert<PC2’s IP>，記錄目前PC1到PC2之路徑又為何，有無更改。**

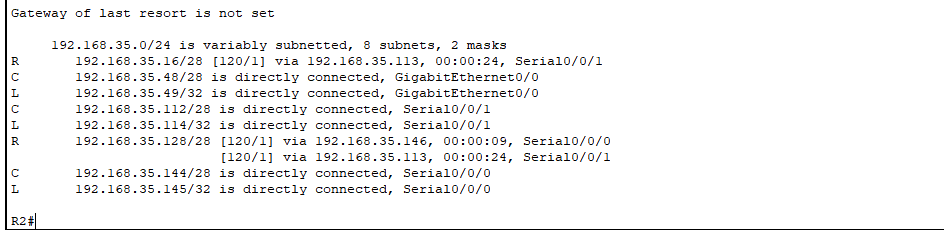
PC1 -> R1 -> R2 -> PC2



R1



R2



R3

