**Punto 3 – Ordenación topológica**

**Versión 1** (en verde el que tomo y en rojo el que modifiqué):

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J |
| 0 | 2 | 2 | 1 | 3 | 1 | 1 | 3 | 1 | 0 |
| **0** | 1 | 2 | 0 | 2 | 1 | 1 | 3 | 1 | 0 |
| 0 | 1 | 1 | **0** | 1 | 0 | 1 | 3 | 1 | 0 |
| 0 | 1 | 1 | 0 | 0 | **0** | 1 | 2 | 1 | 0 |
| 0 | 1 | 1 | 0 | **0** | 0 | 0 | 2 | 0 | 0 |
| 0 | 1 | 1 | 0 | 0 | 0 | **0** | 1 | 0 | 0 |
| 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | **0** | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | **0** |
| 0 | **0** | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

SORT TOPOLÓGICO:

A – D – F – E – G – I – J – B – C - H

**Versión 2** (en verde el que tomo y en rojo el que modifiqué):

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J |
| 0 | 2 | 2 | 1 | 3 | 1 | 1 | 3 | 1 | 0 |
| 0 | 1 | 2 | 1 | 3 | 1 | 1 | 3 | 1 | **0** |
| **0** | 0 | 2 | 0 | 2 | 1 | 1 | 3 | 1 | 0 |
| 0 | 0 | 1 | **0** | 1 | 0 | 1 | 3 | 1 | 0 |
| 0 | 0 | 1 | 0 | 0 | **0** | 1 | 2 | 1 | 0 |
| 0 | 0 | 1 | 0 | **0** | 0 | 0 | 2 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | **0** | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | **0** | 1 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

SORT TOPOLÓGICO:

J – A – D – F – E – I – G – B – C - H

PILA (apilo todos los que tienen grado de entrada = 0 y voy desapilando, y repitiendo):

0 - -> APILO todos los que tienen grado de entrada = 0 -> // +A +J

1- A – J // -J

2- A // -A +B +D

3- B – D // -D +F

4- B – F // -F +E

5- B – E // -E +G +I

6- B – G – I // -I

7- B – G // -G

8- B // -B +C

9- C // -C +H

10- H // -H

**Versión 3** (pila en Post-Orden):

SORT TOPOLÓGICO:

J – A – D – F – E – I – G – B – C - H

PILA (en post-orden y en orden alfabético) -> DESAPILAR para obtener sort

H – C – B – G – I – E – F – D – A - J