## Deferred Acceptance Algorithm

Which of the following are posible ina stable matching instance with $n$ dodctors and $n$ hositats the deferered acceetance algorithm, a doctor might set matched with the same hospital twie
Poosible O Posstle
O Imossible Corect
 $\qquad$
A doctoropotima
O Posibl
O
onsisishe $\qquad$
There misht b be
O Possil
0 Impossible

## 2 Stable Matching Example




| ${ }^{(A, B, C, ~, ~, ~ E ~] ~(1) ~}$ | (4) 3 [3, $4,5,1,2]$ |
| :---: | :---: |
| ${ }^{[B, C, ~, ~, ~ E, ~ A ~ A ~(2) ~}$ | (B) $44,5,1,2,3,3$ |
| $[C, D, E, A, B]$ (3) | (c) $[2,3,5,4,1]$ |
| ${ }^{[D, E, ~ E, ~ A, ~ B, ~ C] ~(4) ~}$ | (D) $5,1,2,3,4]$ |
| $[E, A, B, C, D]$ (5) | (¢) $[1,2,3,4,5]$ |


| A's match: | 3 |
| :---: | :---: |
|  | Corect |
| $B^{\prime}$ 's match: |  |
|  | 4 |
|  | Correct |
| $C^{\prime} \mathrm{s}$ match: |  |
|  | 2 |
|  | Corect |
| D's match: |  |
|  | 5 |
|  | Corect |
| E's match: |  |
|  | 1 |
|  | Corect |
| What is the hospital optimal matching? <br> A's match: |  |
|  |  |
|  | 1 |
|  | Correct |
| $B^{\prime}$ 's match: |  |
|  | 2 |
|  | Corect |
| C's match: |  |
|  |  |
|  | Correct |
| D's match: | 4 |
|  | Correct |
| Es match: |  |
|  | 5 |

Ale tes
0
0
Yos
 O Yes
O
O
No


number
03
03
011
0
0
$\circ$
0
0
0
0

