

INSERIMENTI

IL NOVO Z CHE SI INSERISCE VIENE SEMPRE COLORATO DI ROSSO SUBITO.

4 SCENARI:

	AZIONE
0. $Z = \text{ROOT}$	→ COLOR BLACK
1. $Z.\text{UNCLE} = \text{RED}$	→ RECOLOR
2. $Z.\text{UNCLE} = \text{BLACK}$ (TRIANGLE)	→ ROTATE Z, PARENT
3. $Z.\text{UNCLE} = \text{BLACK}$ (LINE)	→ ROTATE $Z, \text{GRANDPARENT}$ E RECOLOR

CASO 0 $Z = \text{ROOT}$

1. INSERISCO Z E LO COLORO SUBITO DI ROSSO

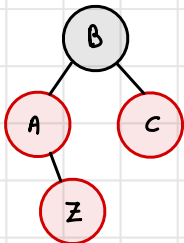


2. CORREGGO LA VIOLAZIONE COLORANDO DI NERO LA RADICE

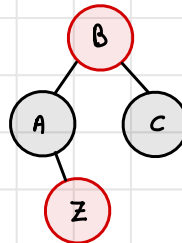


CASO 1 $Z.\text{UNCLE} = \text{RED}$

1. INSERISCO Z E LO COLORO SUBITO DI ROSSO

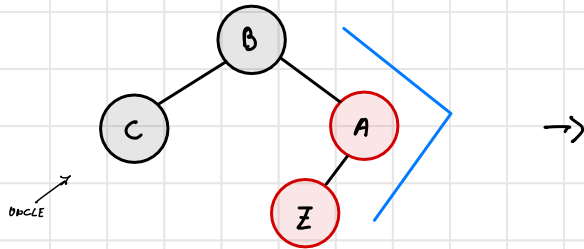


2. RICOLORO PADRE, ZIO E NONNO

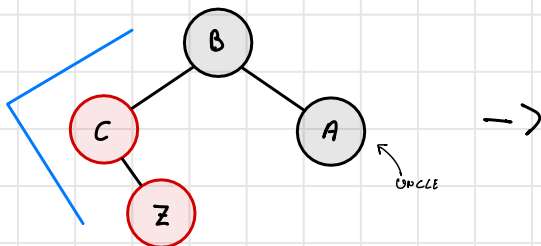


CASO 2 2. UNCLE = BLACK (TRIANGLE)

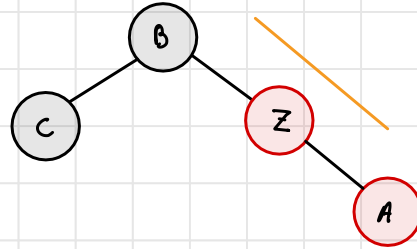
1. INSERISLO Z E LO COLORO SUBITO DI ROSSO



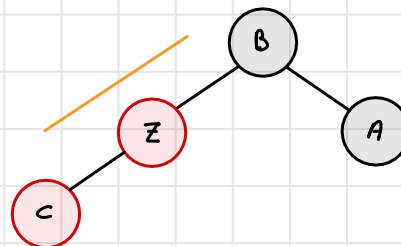
OPPURE



2. EFFETTUO UNA ROTAZIONE PER RITROVARMICI NEL CASO 3

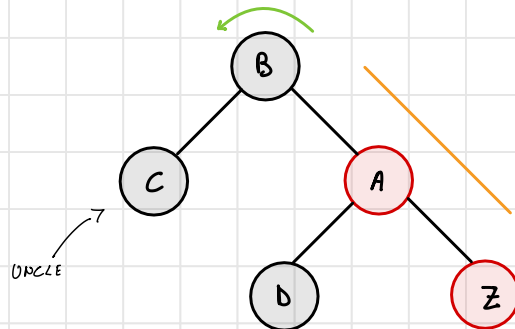


OPPURE

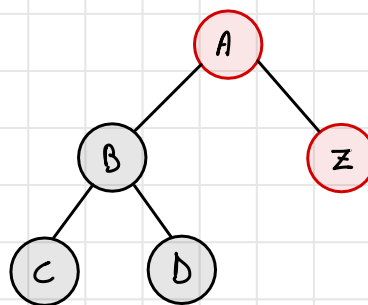


CASO 3 2. UNCLE = BLACK (LINE)

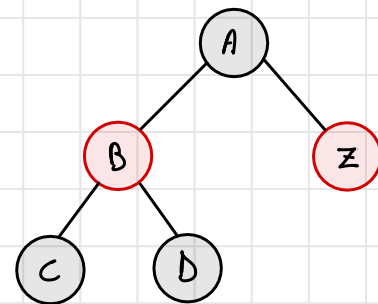
1. INSERISLO Z E LO COLORO SUBITO DI ROSSO



2. EFFETTUO UNA ROTAZIONE SUL NONNO NELLA DIREZIONE OPPOSTA A Z.



3. SCAMBIO I COLORI DEL PADRE E DEL NONNO ORIGINALI



OPPURE

