Algoritmer och Datastrukturer

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Visuellt exempel av insättning och borttagning i ett röd-svart träd

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2021vt, lp4

Syftet med detta dokument är att ge ett stegvis exempel på hur resultatet av att arbeta med ett röd-svart träd bör bli. Detta så att ni kan testa med värden där ni sedan vet hur resultatet borde bli för varje steg och på det sättet kan upptäcka fel lättare. Notera dock att detta exempel **inte** nödvändigtvis täcker absolut alla möjliga fall som kan uppstå, men bör ändå ta upp en stor mängd av de och fungera som en bra bas.

I graferna så kommer ni se ett antal noder och länkar. Alla är markerade med sitt värde samt sin färg inom paranteser. Blåa pilar indikerar ett vänsterbarn, och röda pilar indikerar ett högerbarn. Innan varje graf kommer också en operation skrivas. Den representerar vad som gjorts innan bilden genererats så att ni själva kan återskapa det hela lättare. Trädet är tomt innan den första operationen utförts.

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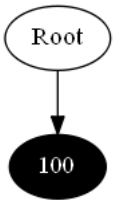

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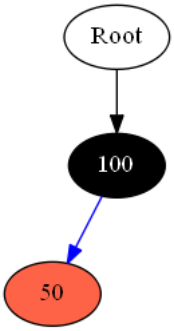

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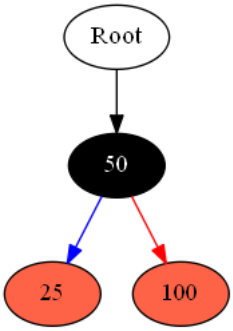

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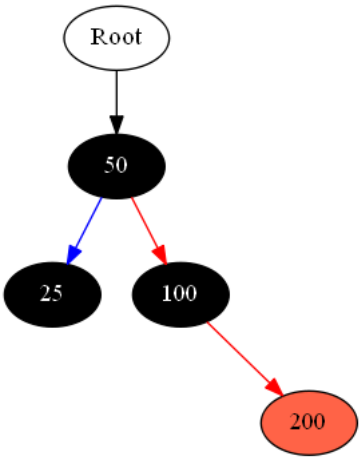

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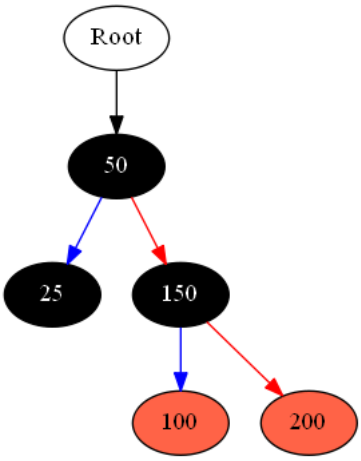

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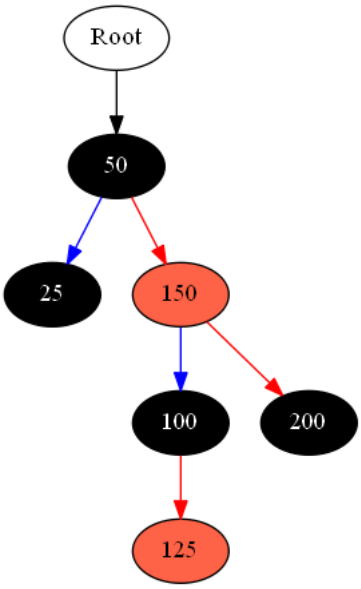

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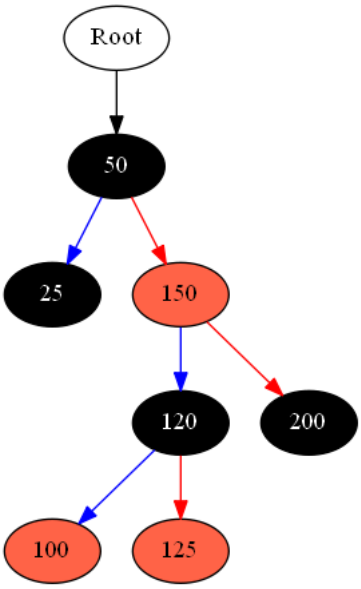

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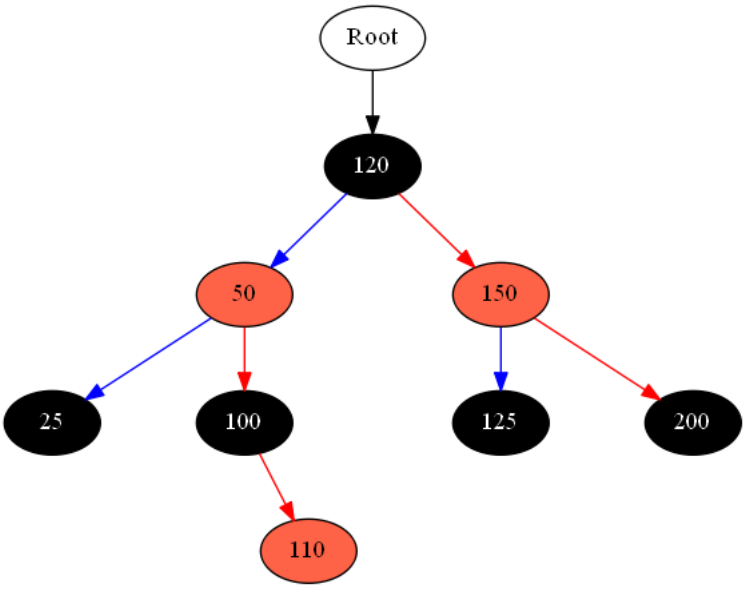

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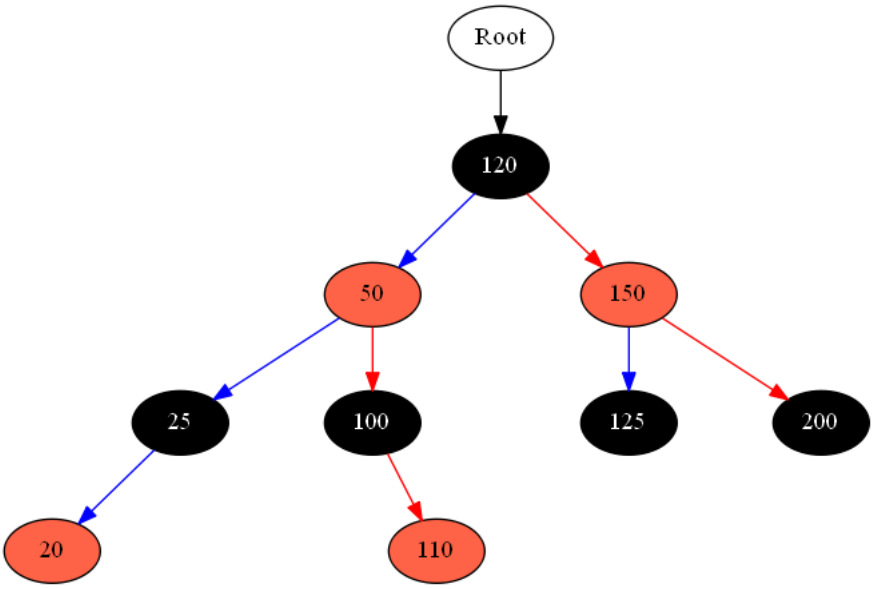

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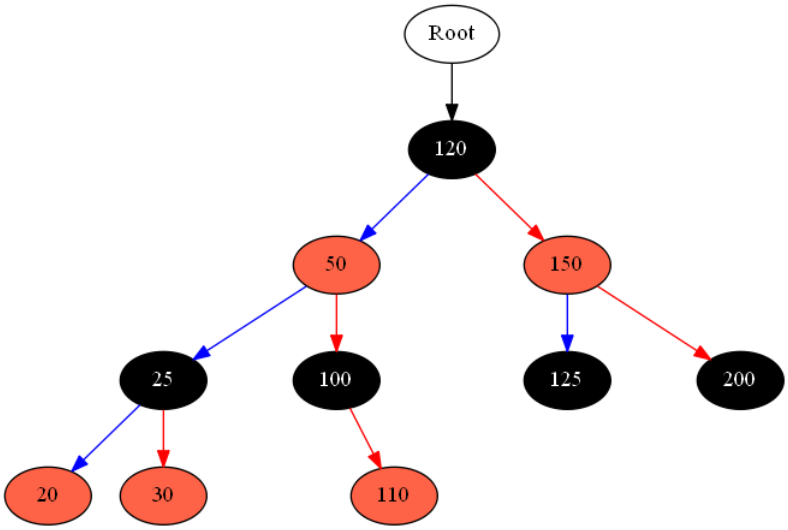

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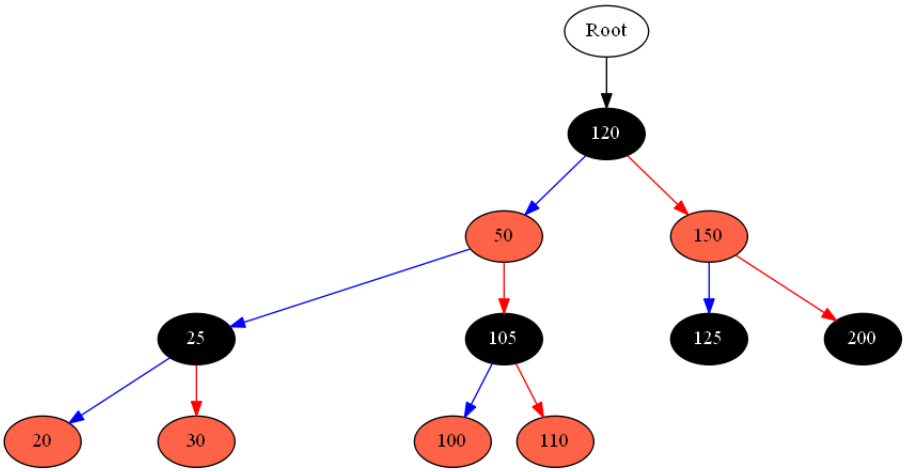

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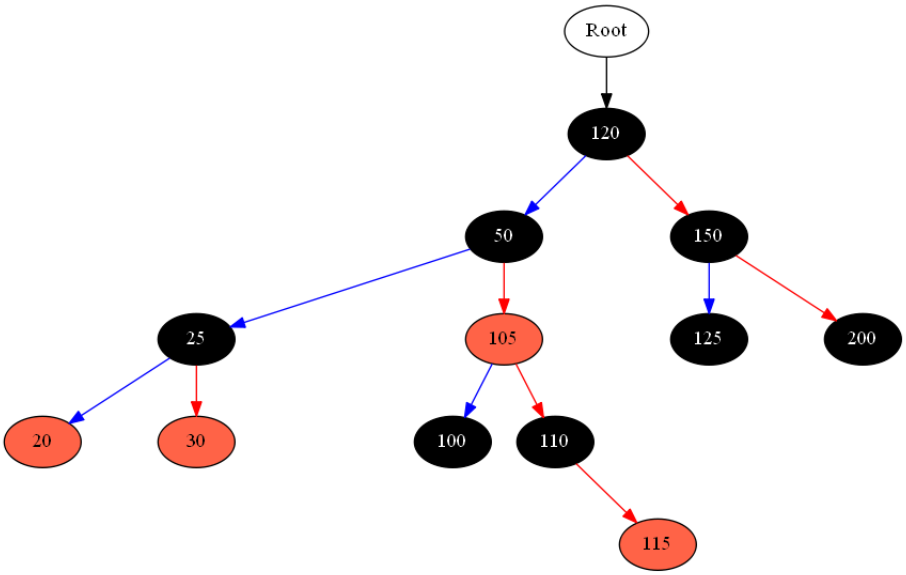

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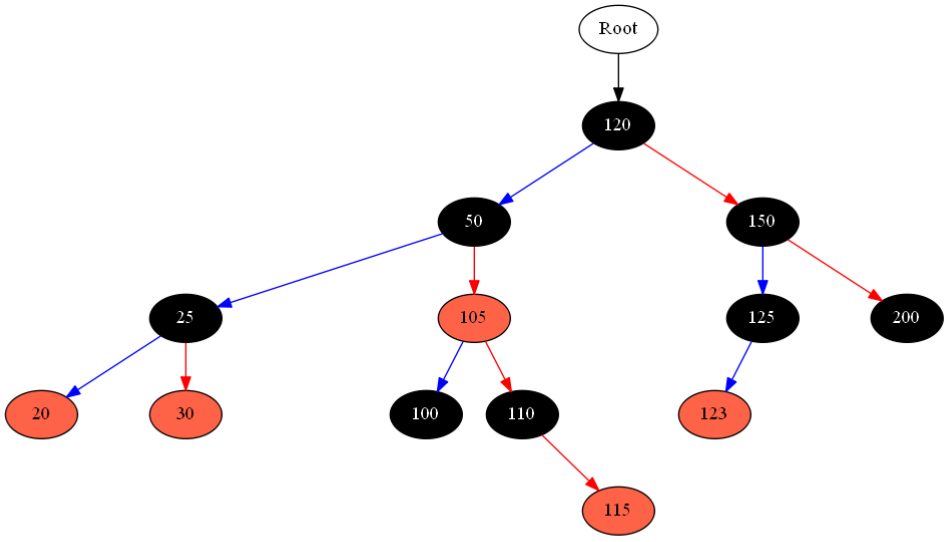

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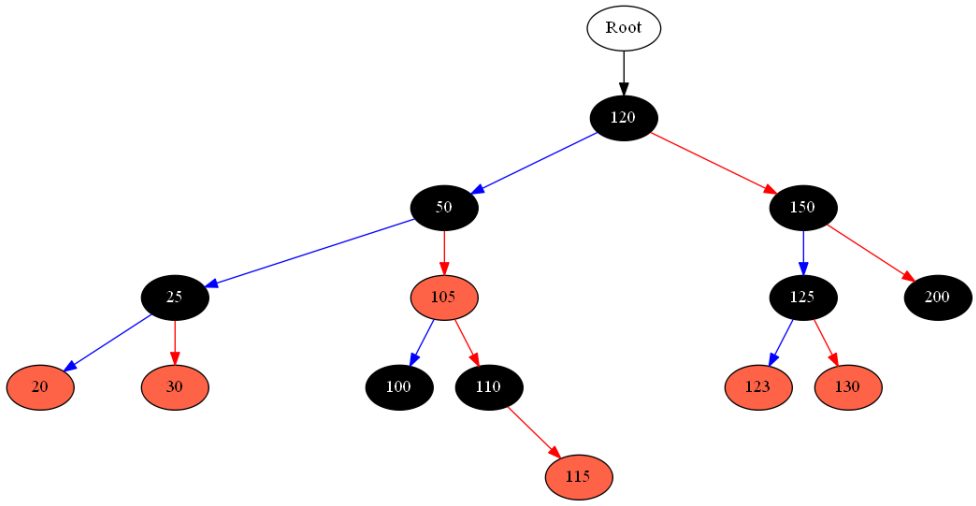

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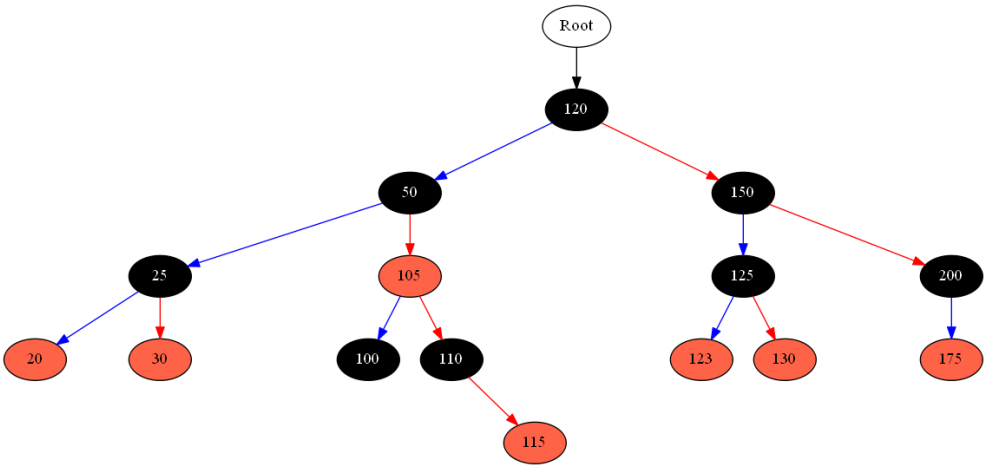

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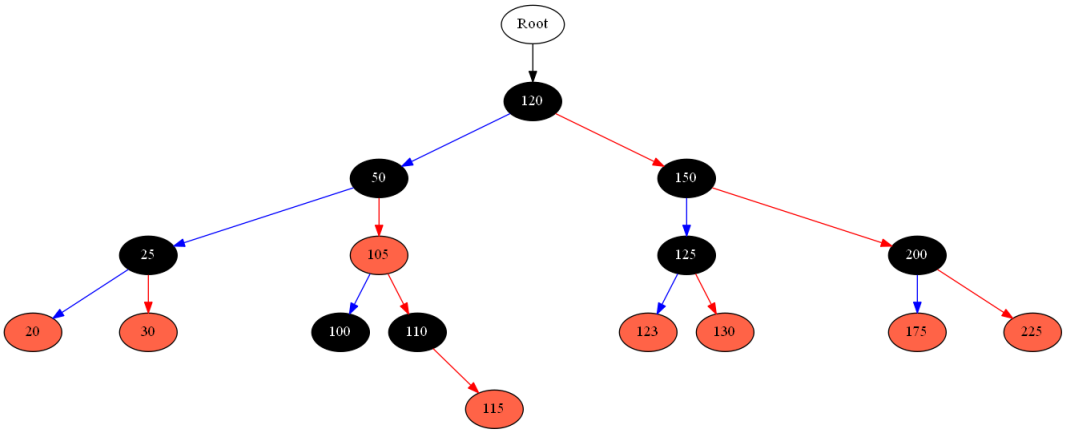

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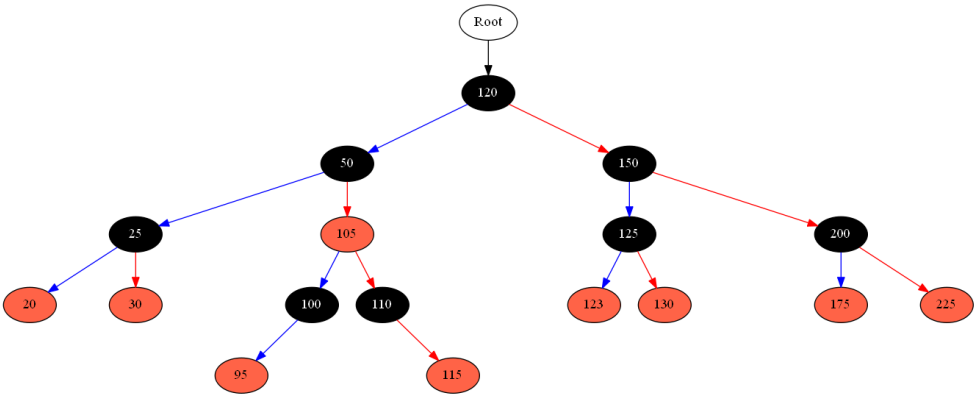

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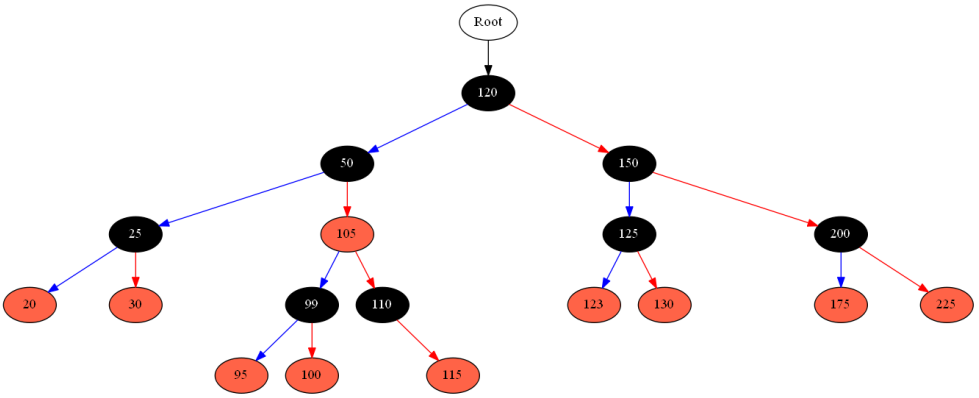

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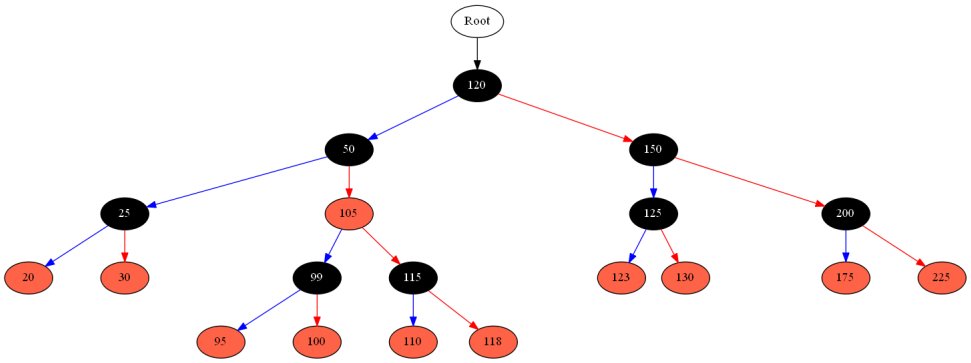

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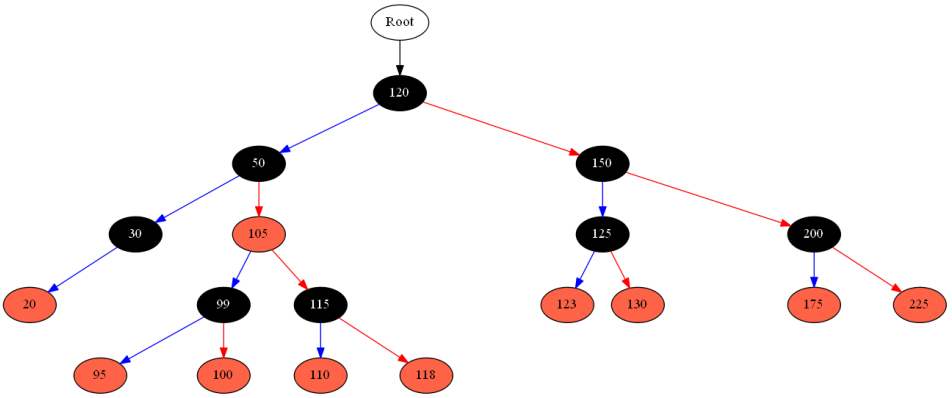

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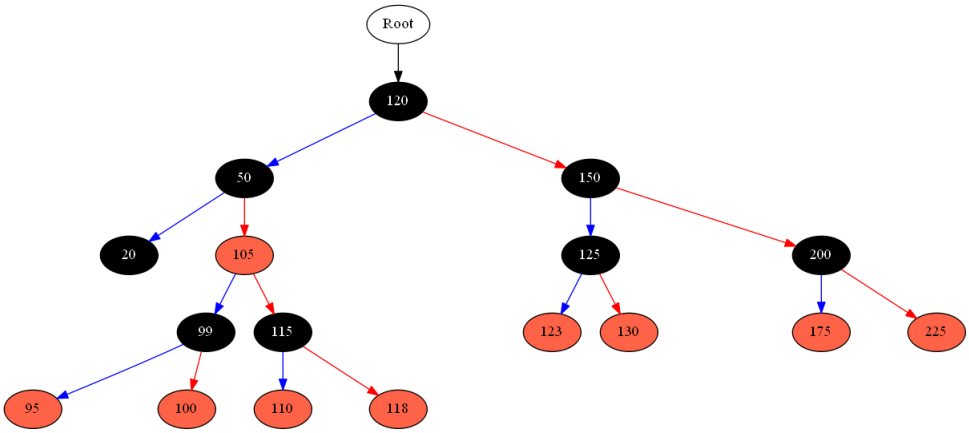

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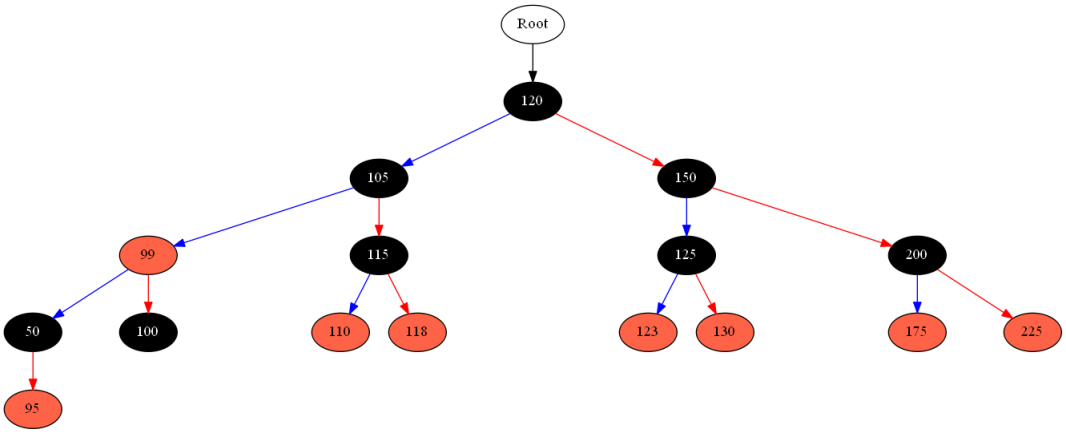

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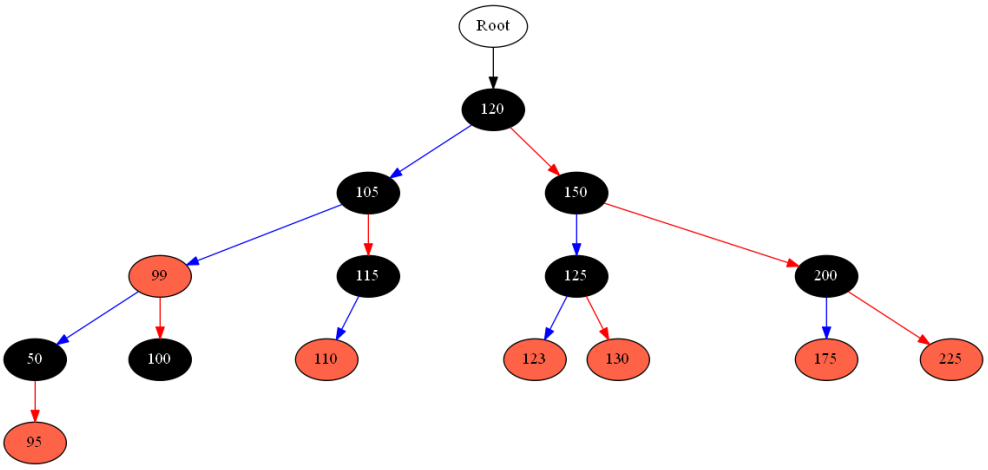

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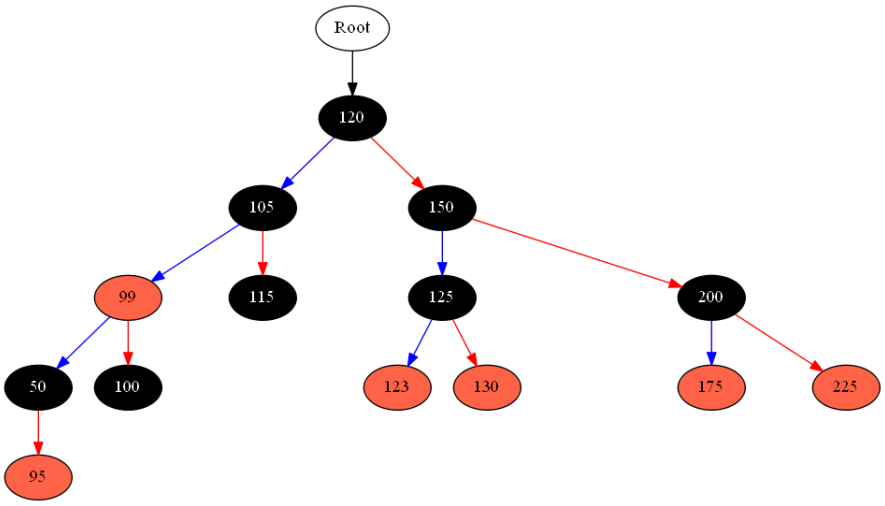

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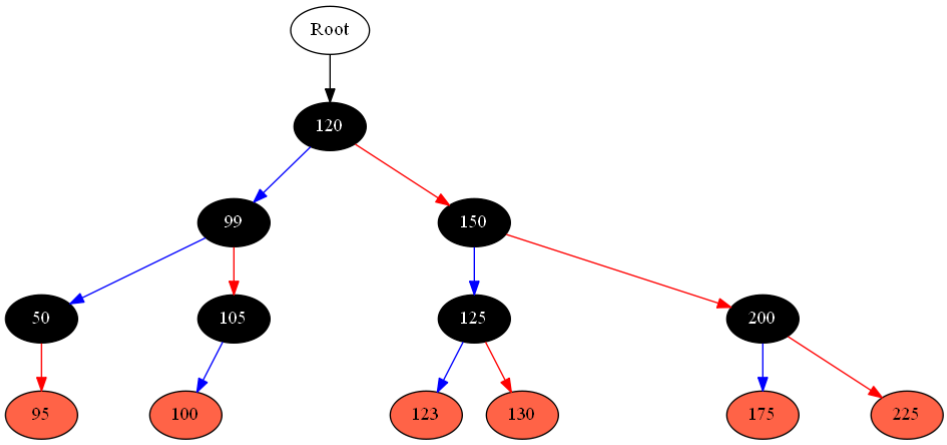

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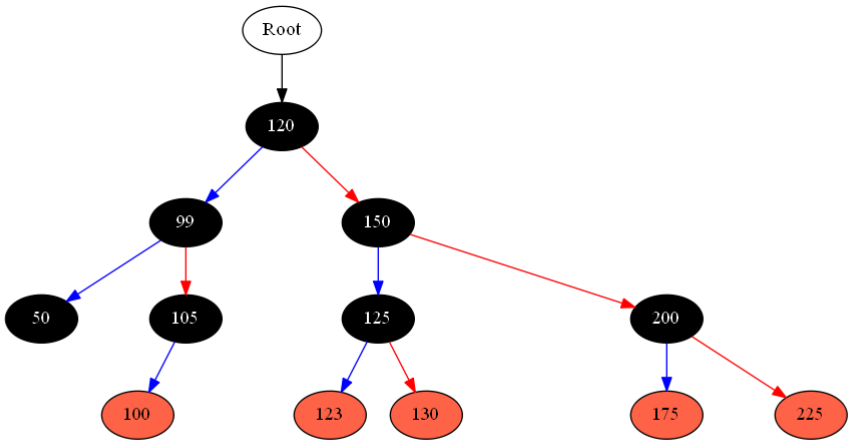

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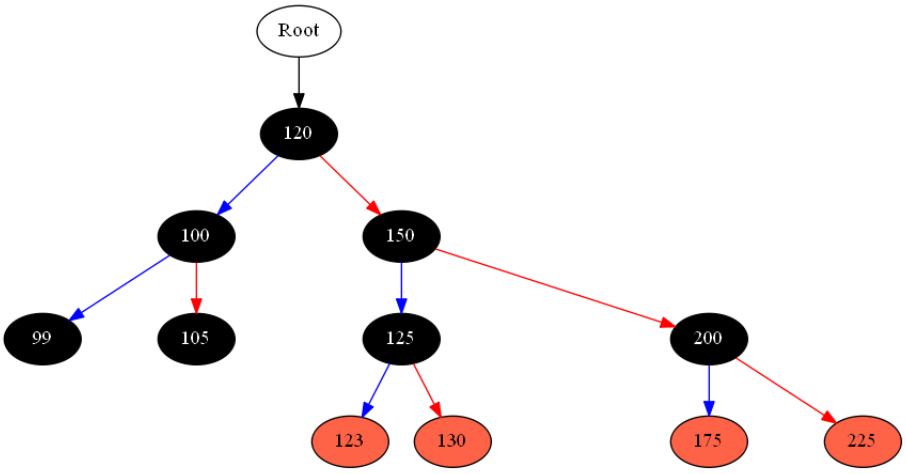

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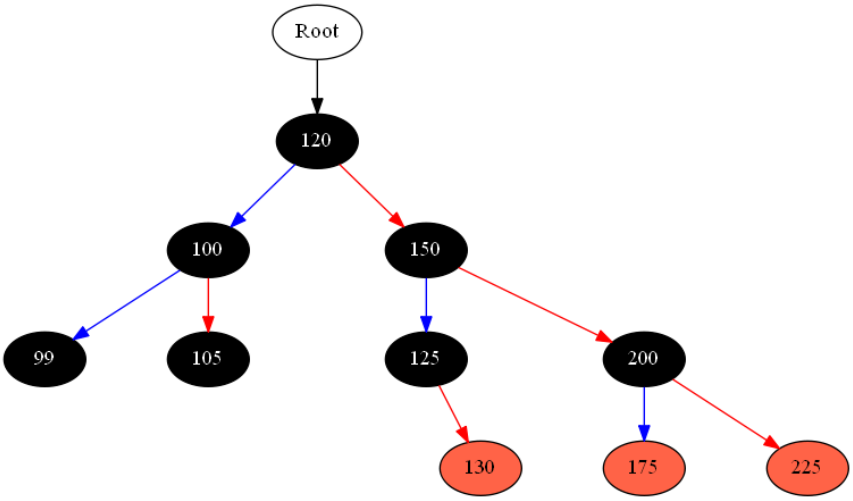

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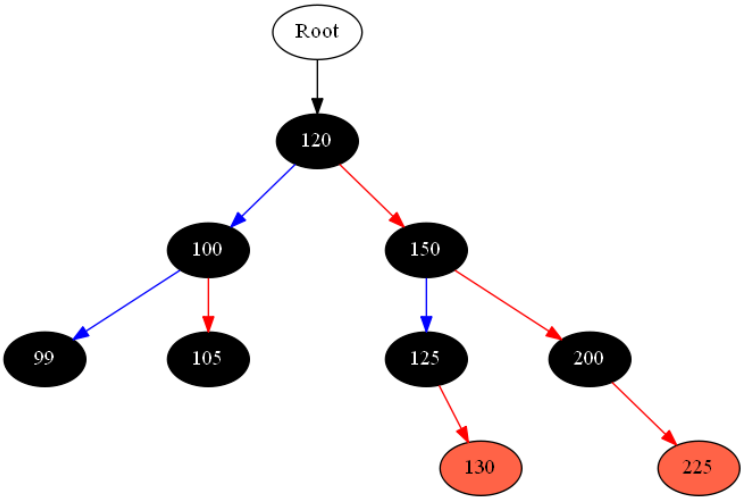

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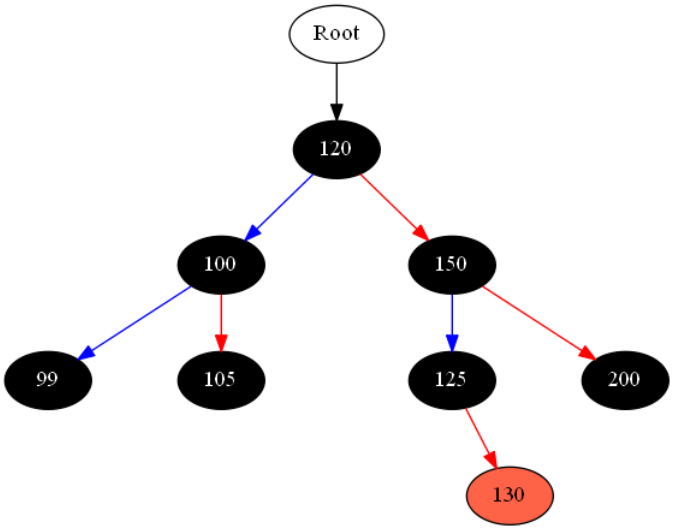

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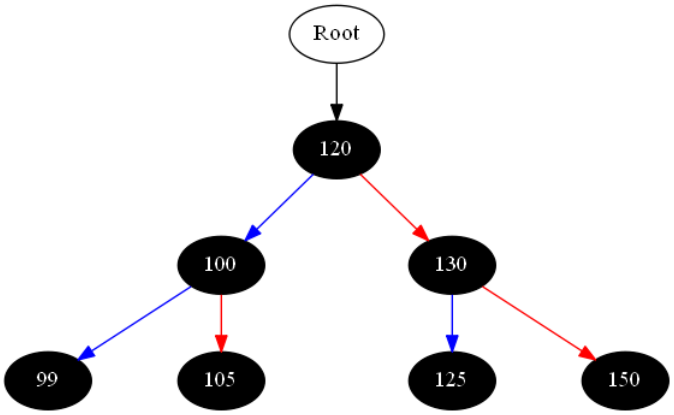

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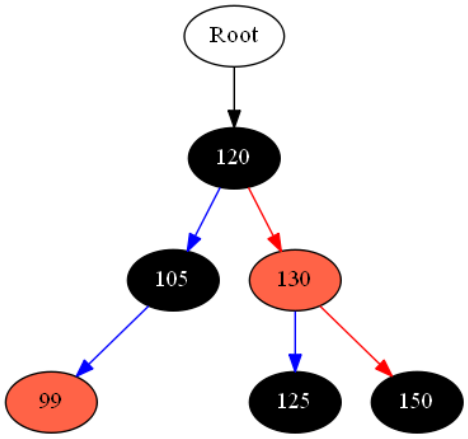

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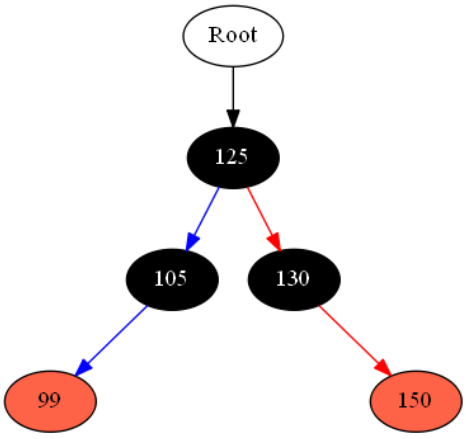

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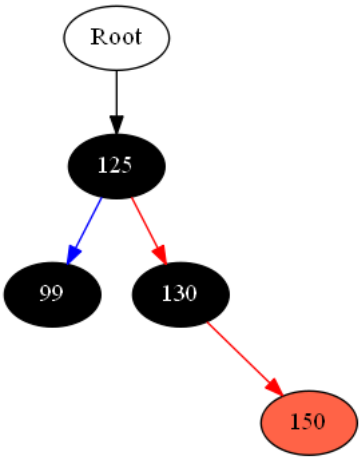

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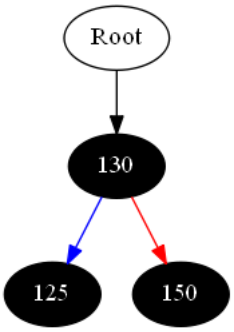

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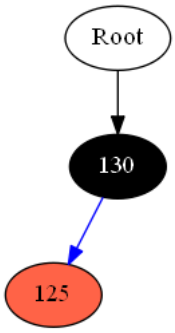

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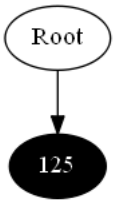

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