3.3 Red-Black BST Demo

click to begin demo

Red-black BST insertion

insert S

Red-black BST insertion

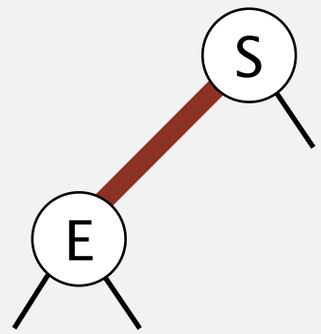
insert S

Red-black BST insertion

insert E

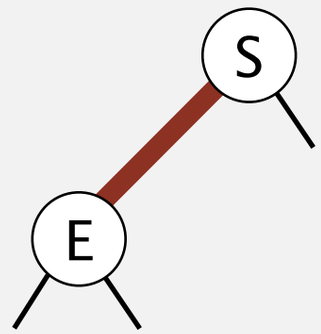
Red-black BST insertion

insert E



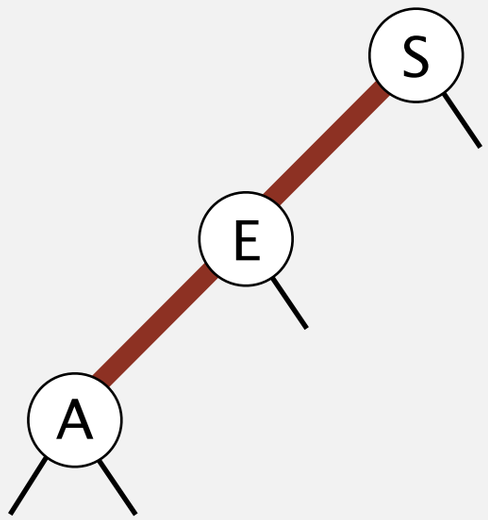
Red-black BST insertion

insert A



Red-black BST insertion

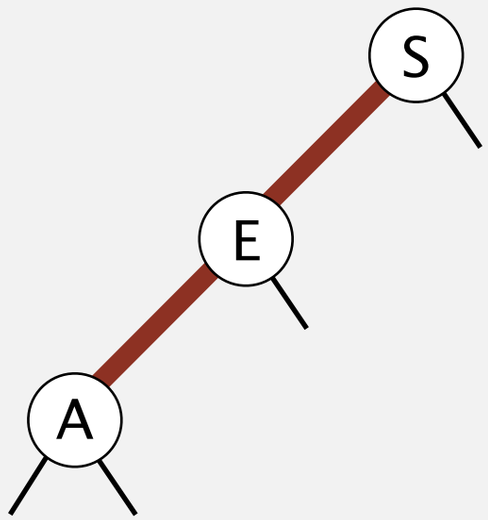
insert A



Red-black BST insertion

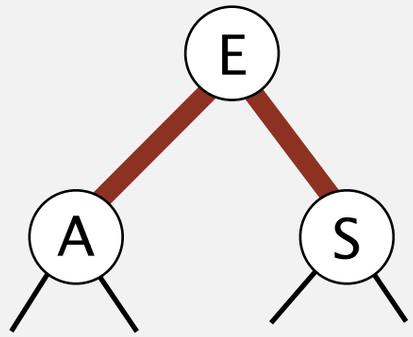
insert A

two left reds in a row
(rotate S right)



Red-black BST insertion

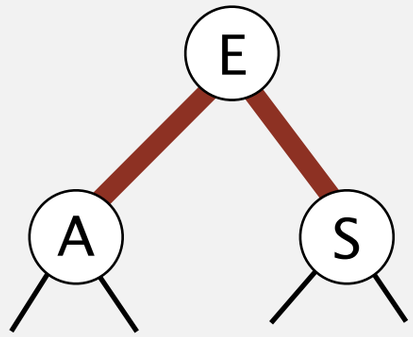
both children red
(flip colors)



Red-black BST insertion

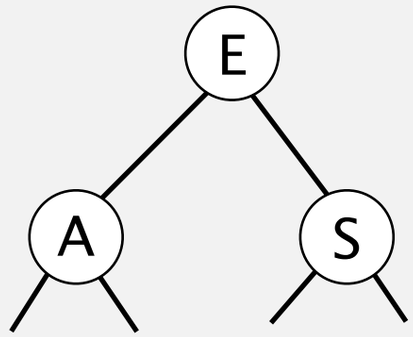
both children red

(flip colors)



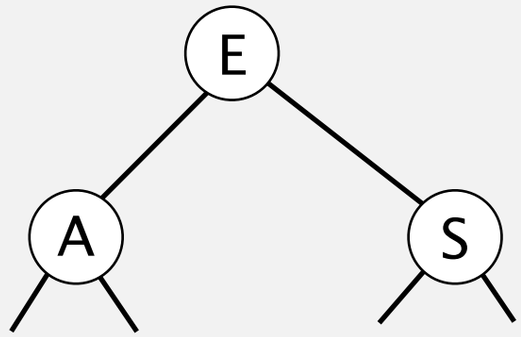
Red-black BST insertion

red-black BST



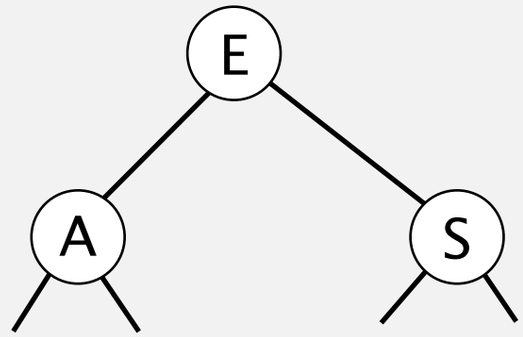
Red-black BST insertion

red-black BST



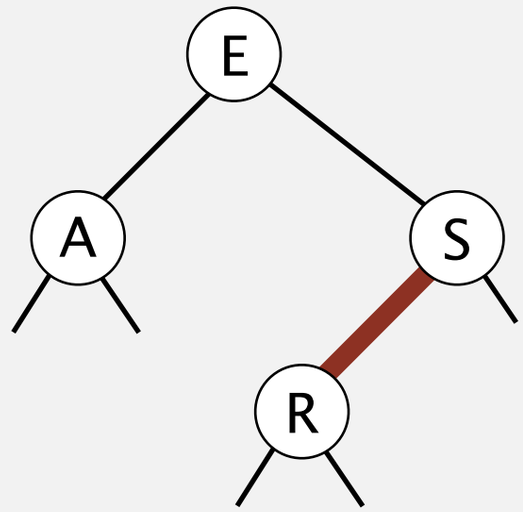
Red-black BST insertion

insert R



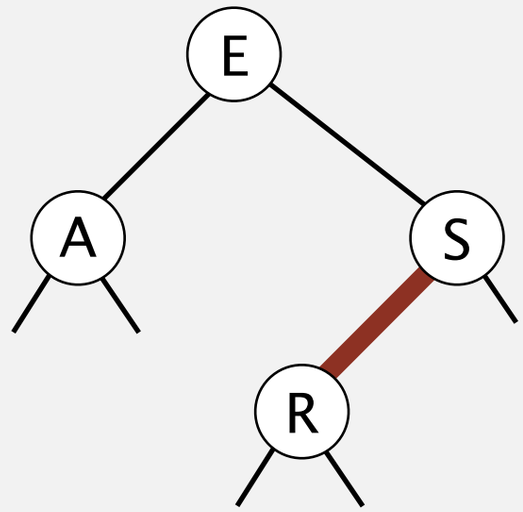
Red-black BST insertion

insert R



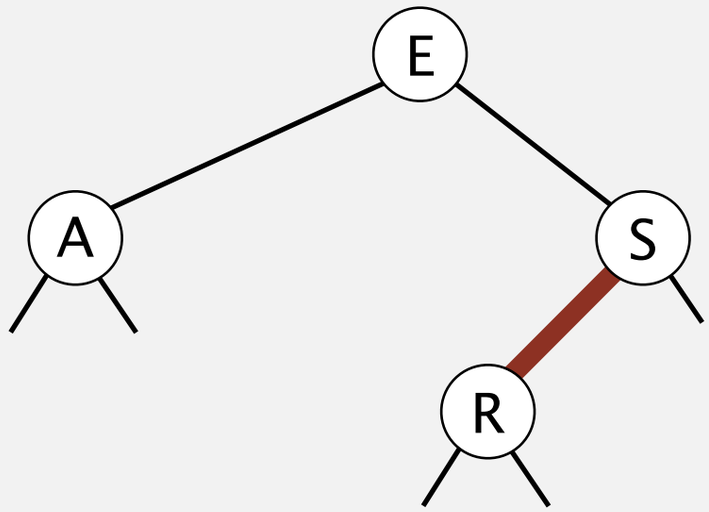
Red-black BST insertion

red-black BST



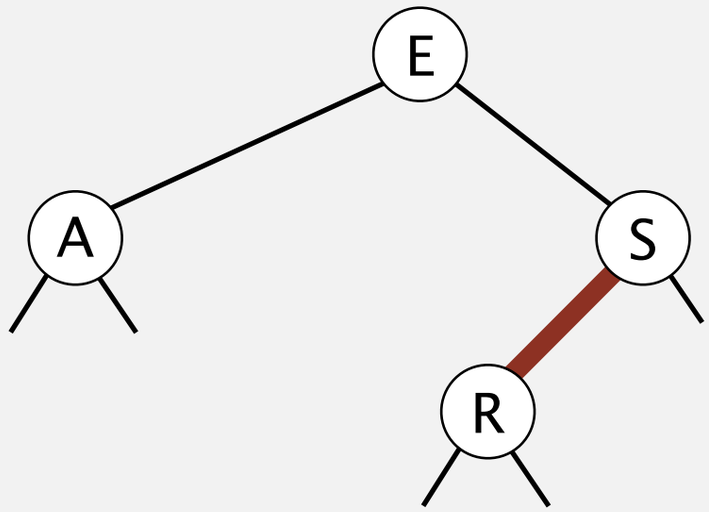
Red-black BST insertion

red-black BST



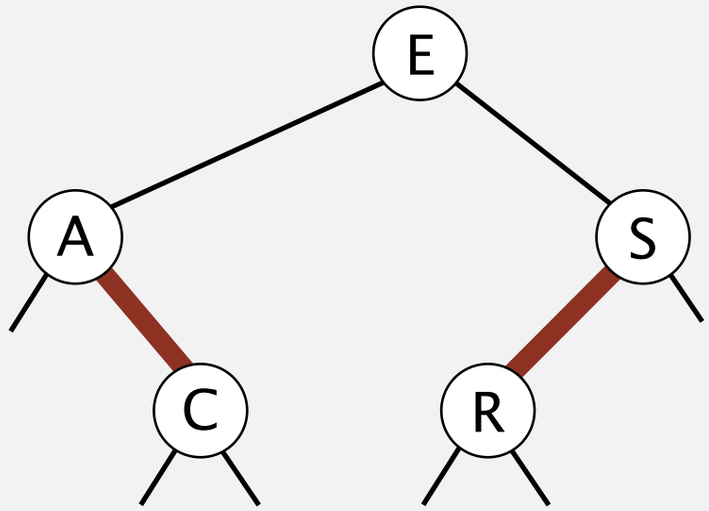
Red-black BST insertion

insert C



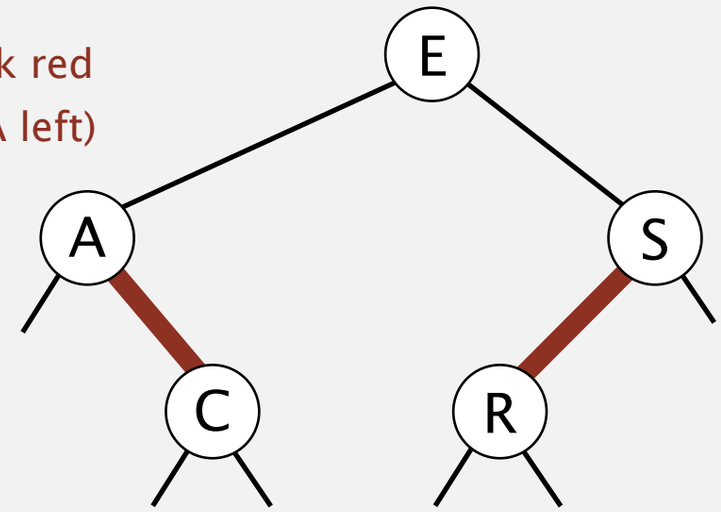
Red-black BST insertion

insert C



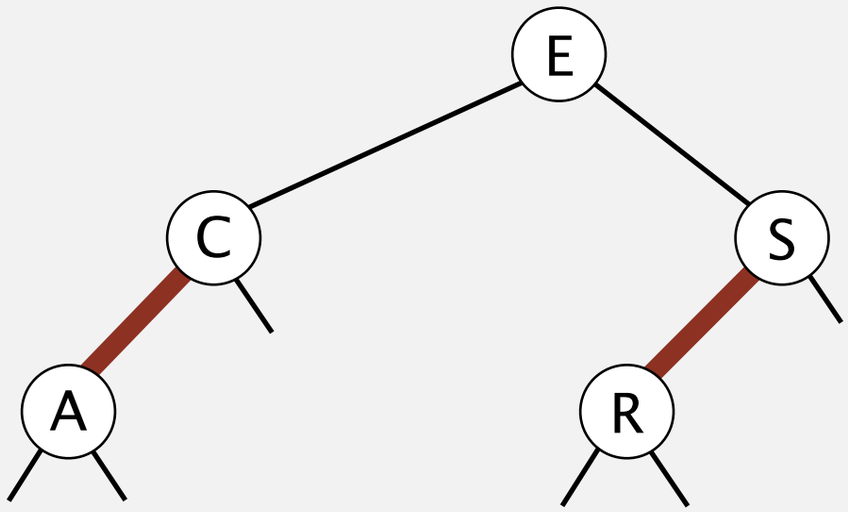
Red-black BST insertion

right link red
(rotate A left)



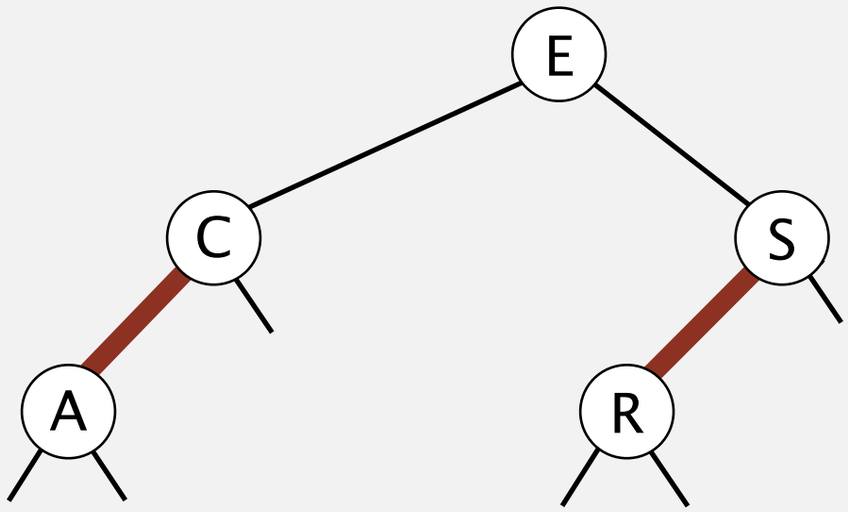
Red-black BST insertion

red-black BST



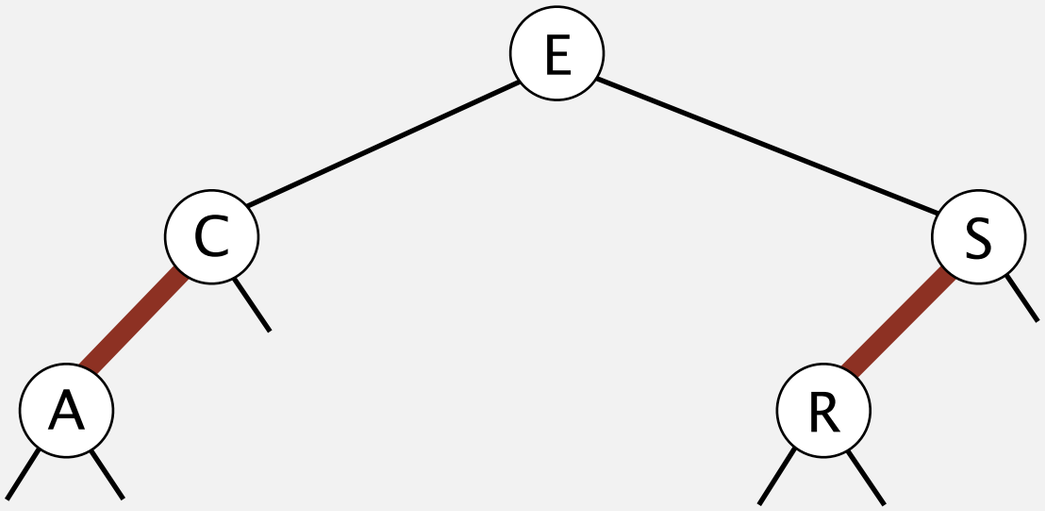
Red-black BST insertion

red-black BST



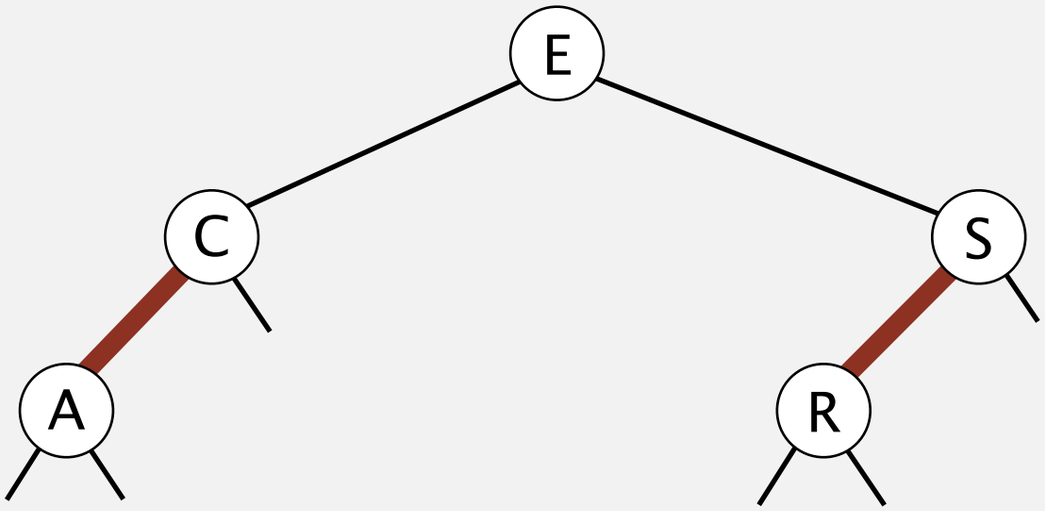
Red-black BST insertion

red-black BST



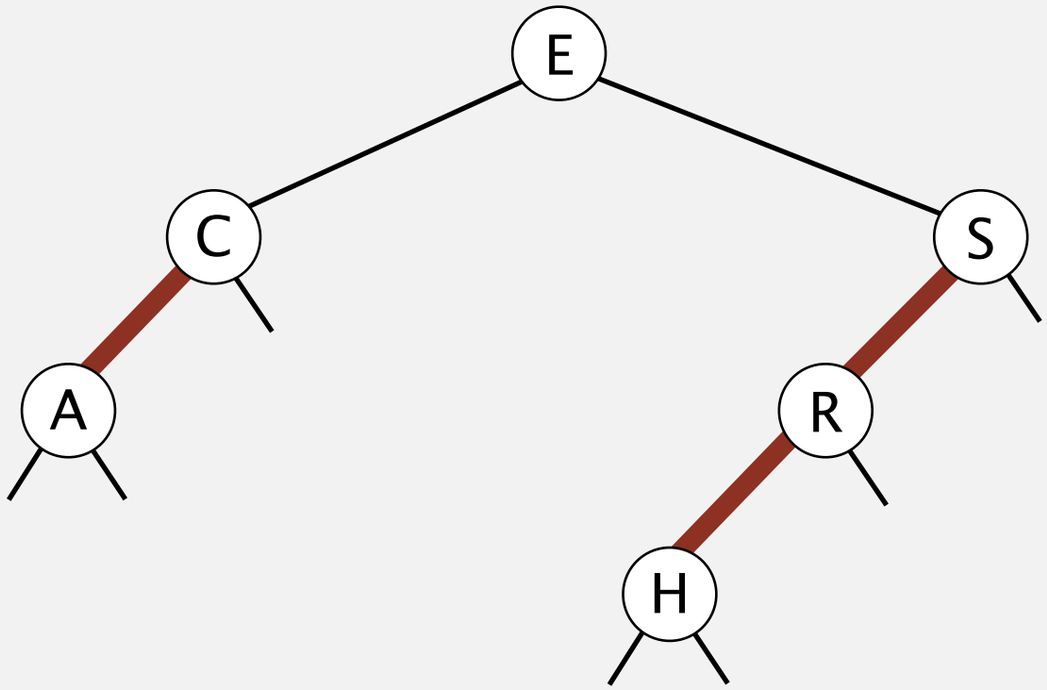
Red-black BST insertion

insert H

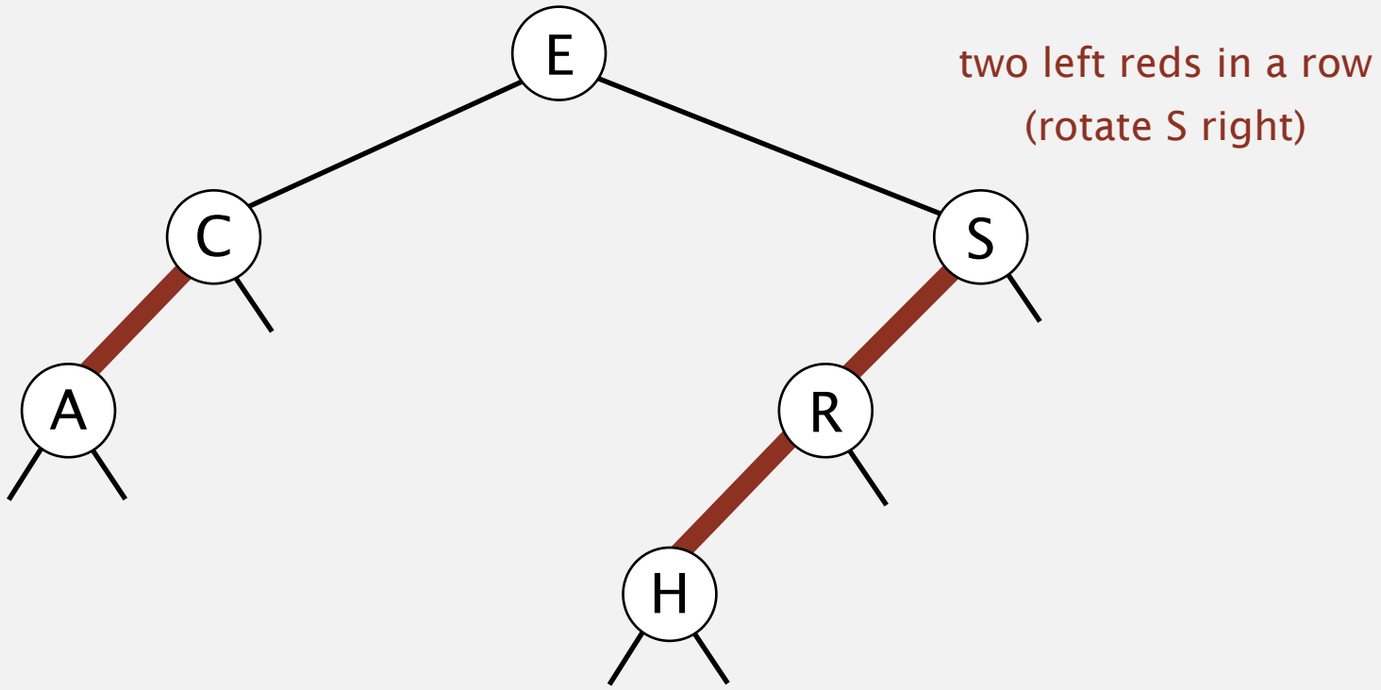


Red-black BST insertion

insert H



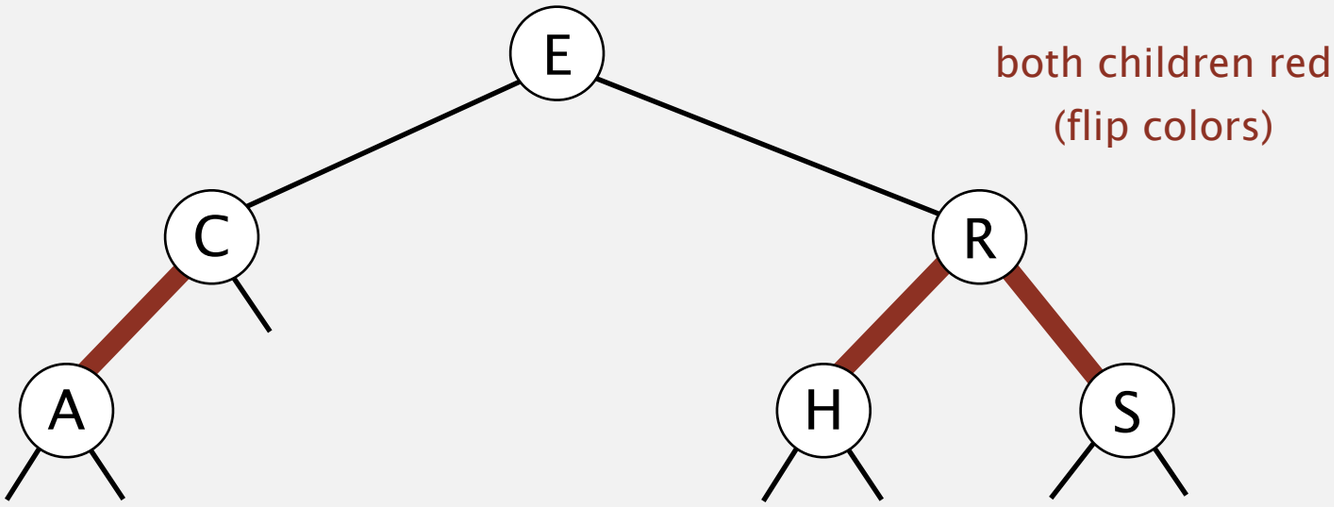
Red-black BST insertion



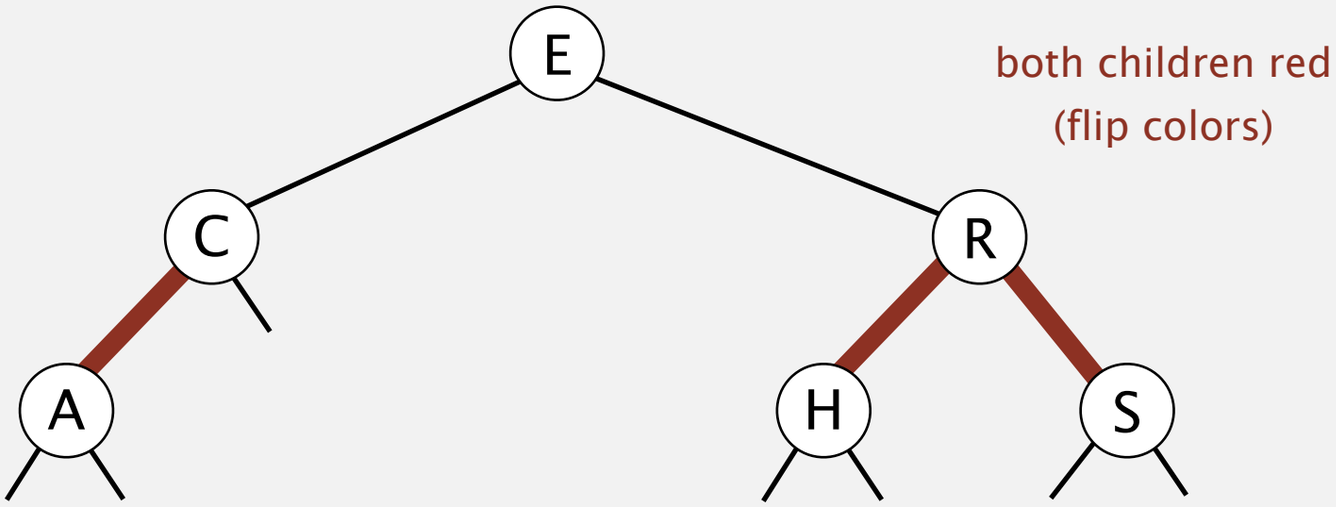
two left reds in a row

(rotate S right)

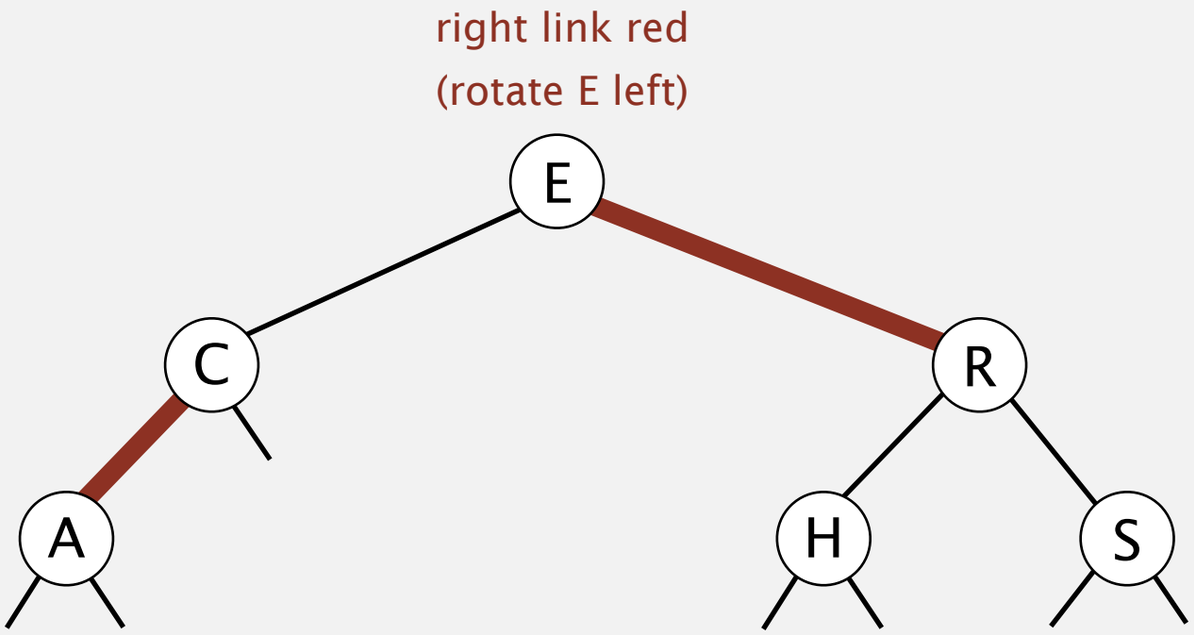
Red-black BST insertion



Red-black BST insertion

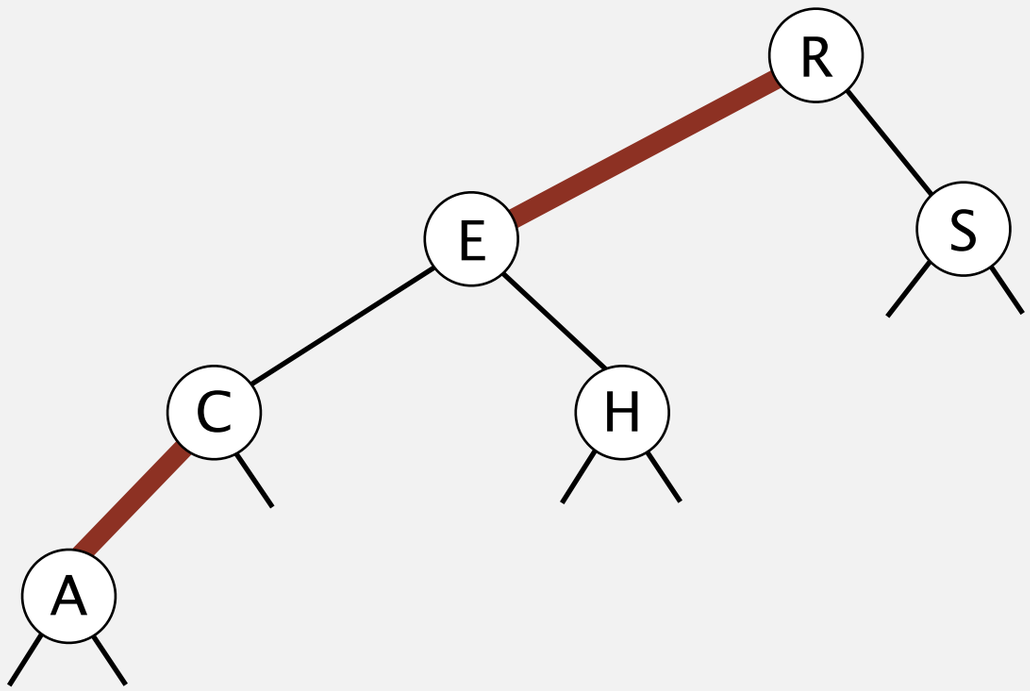


Red-black BST insertion



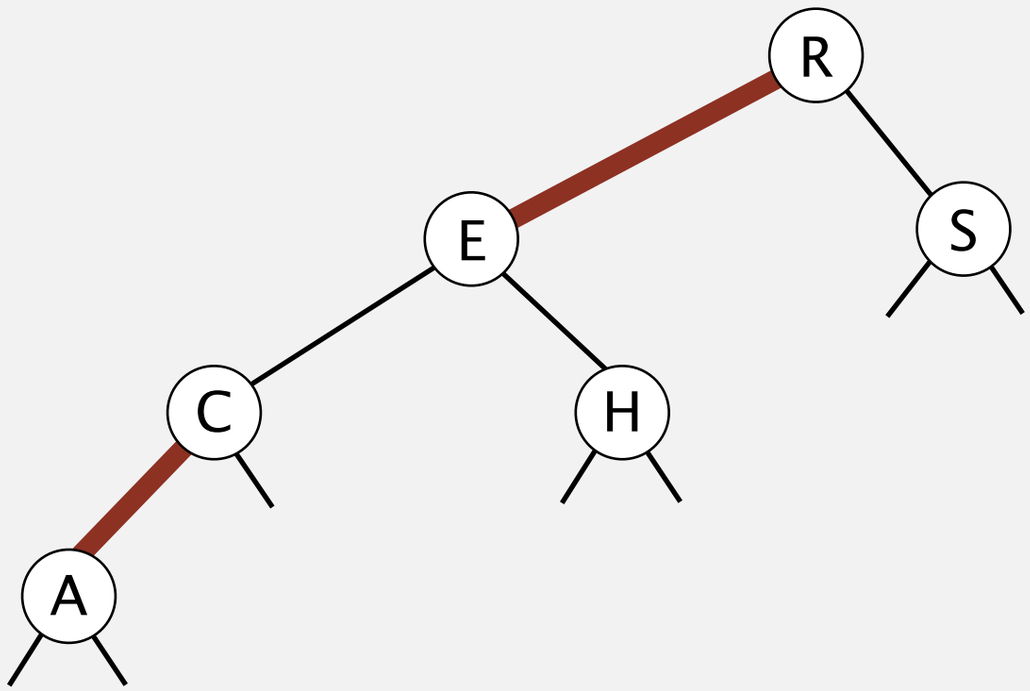
Red-black BST insertion

red-black BST



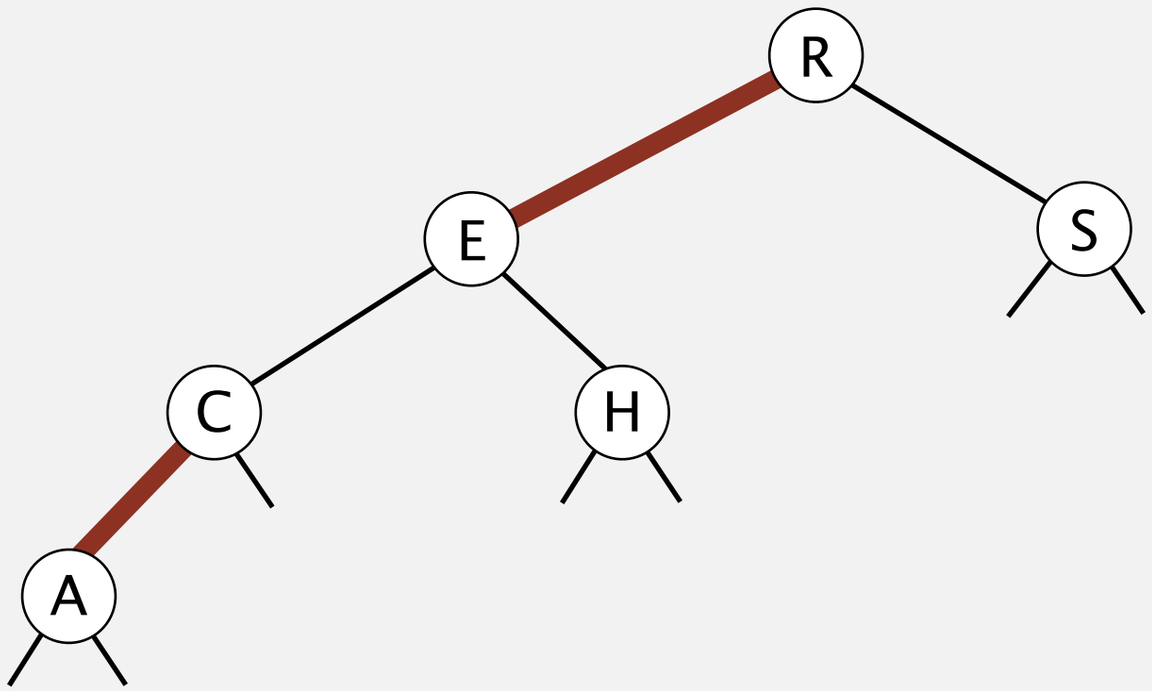
Red-black BST insertion

red-black BST



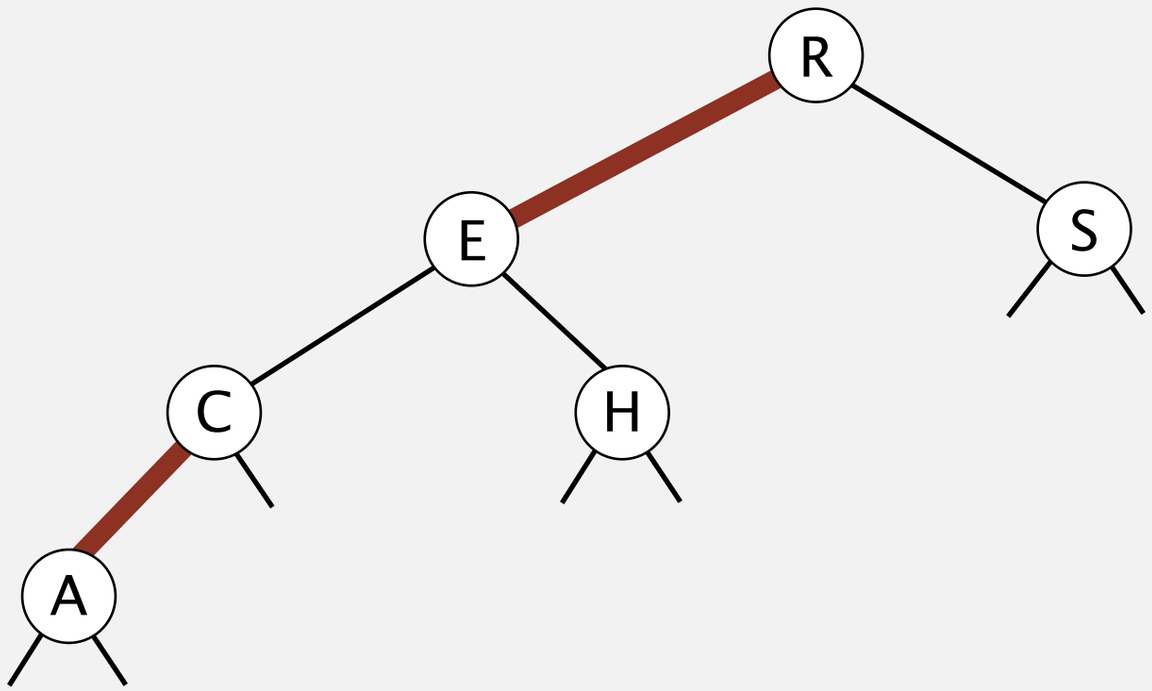
Red-black BST insertion

red-black BST



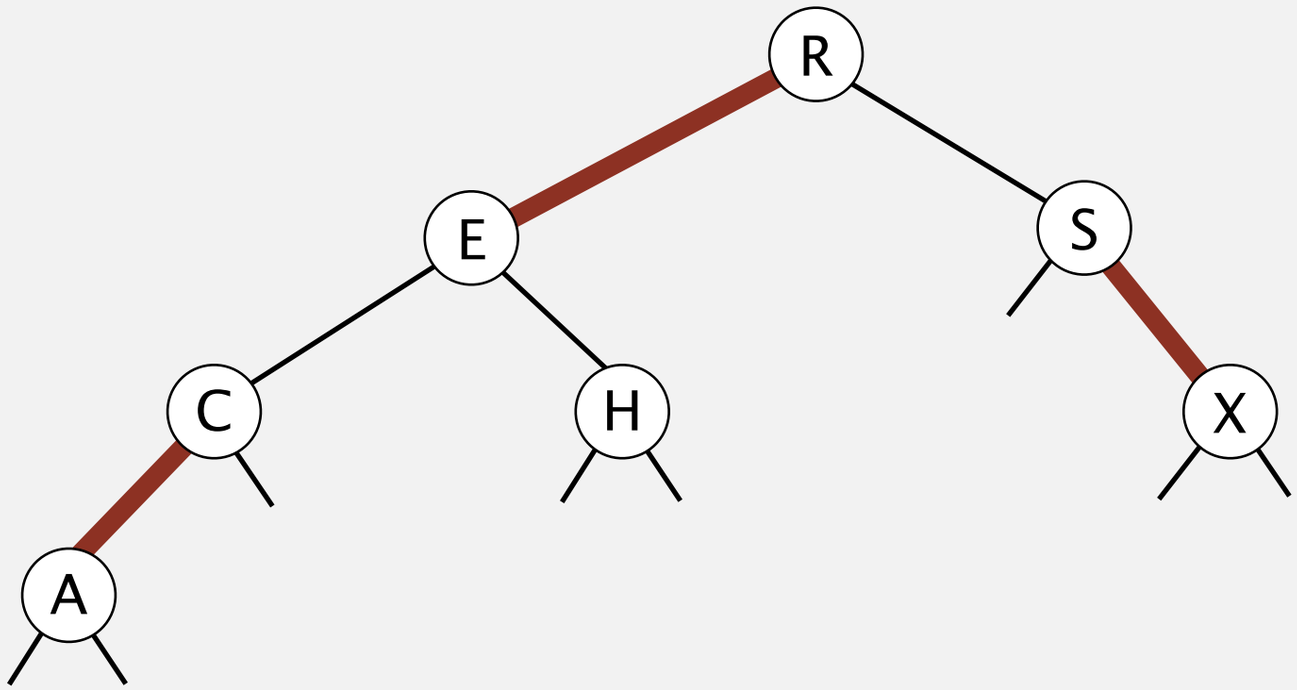
Red-black BST insertion

insert X



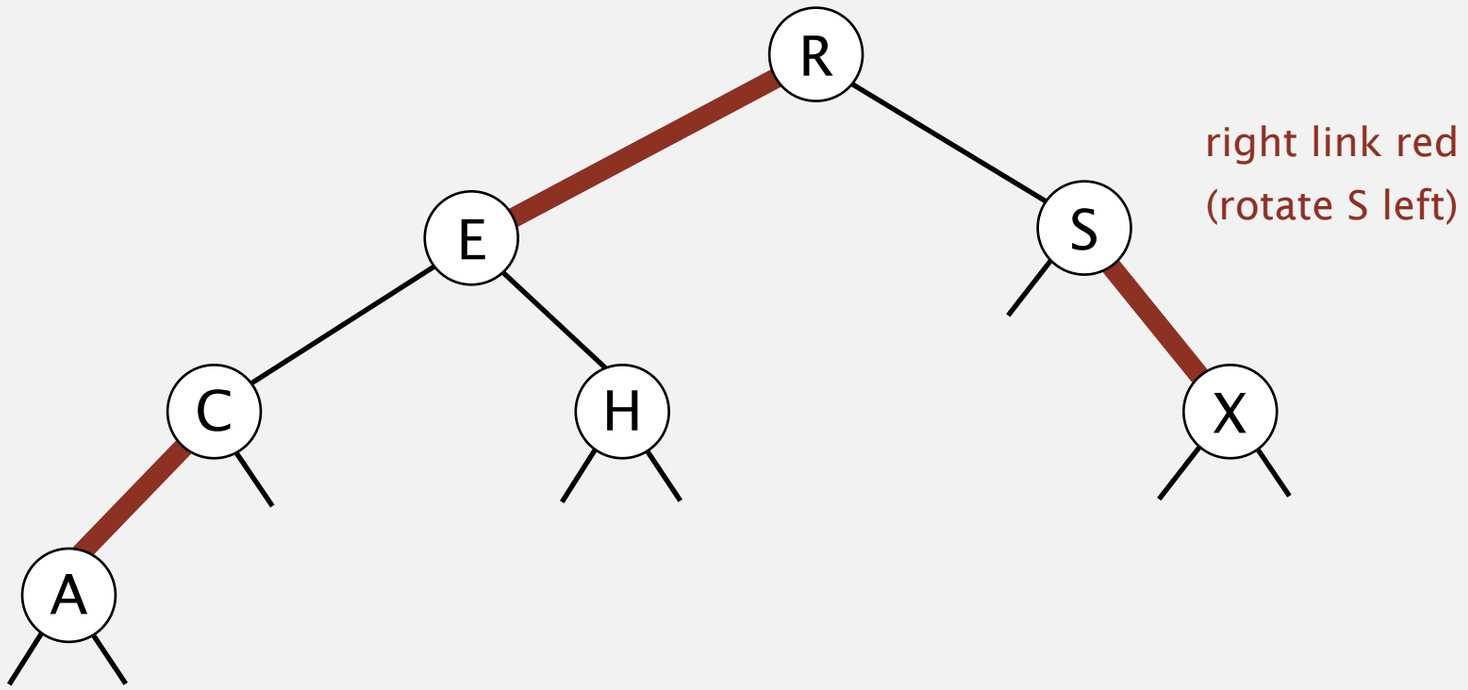
Red-black BST insertion

insert X



Red-black BST insertion

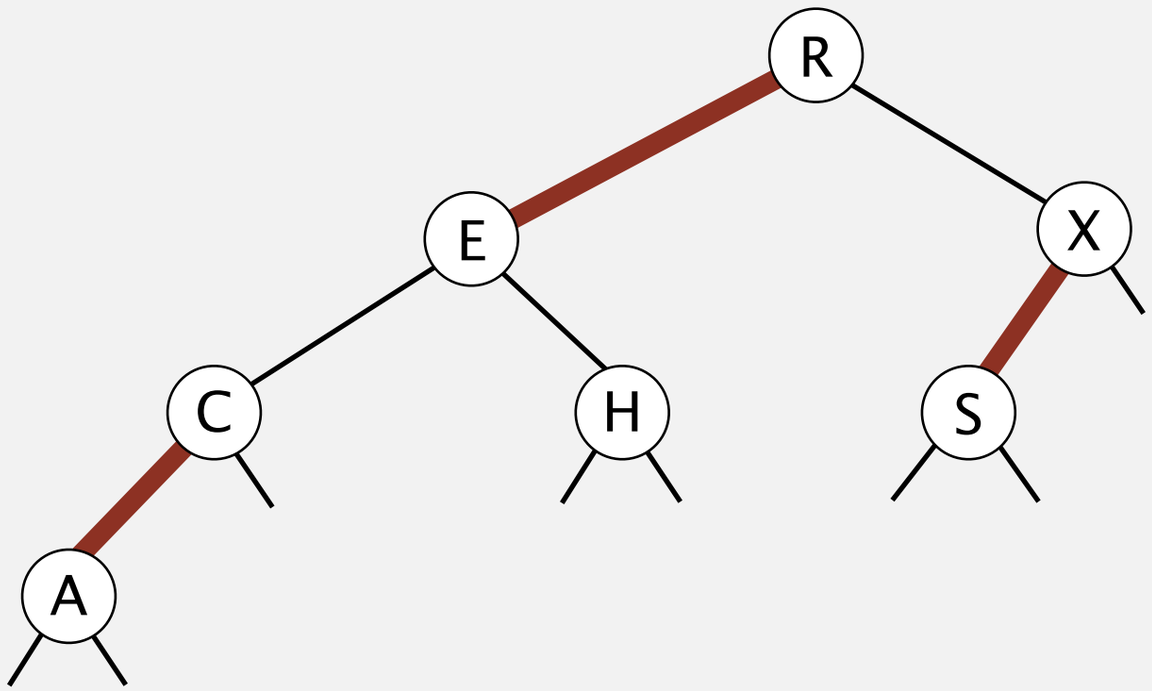
insert X



right link red
(rotate S left)

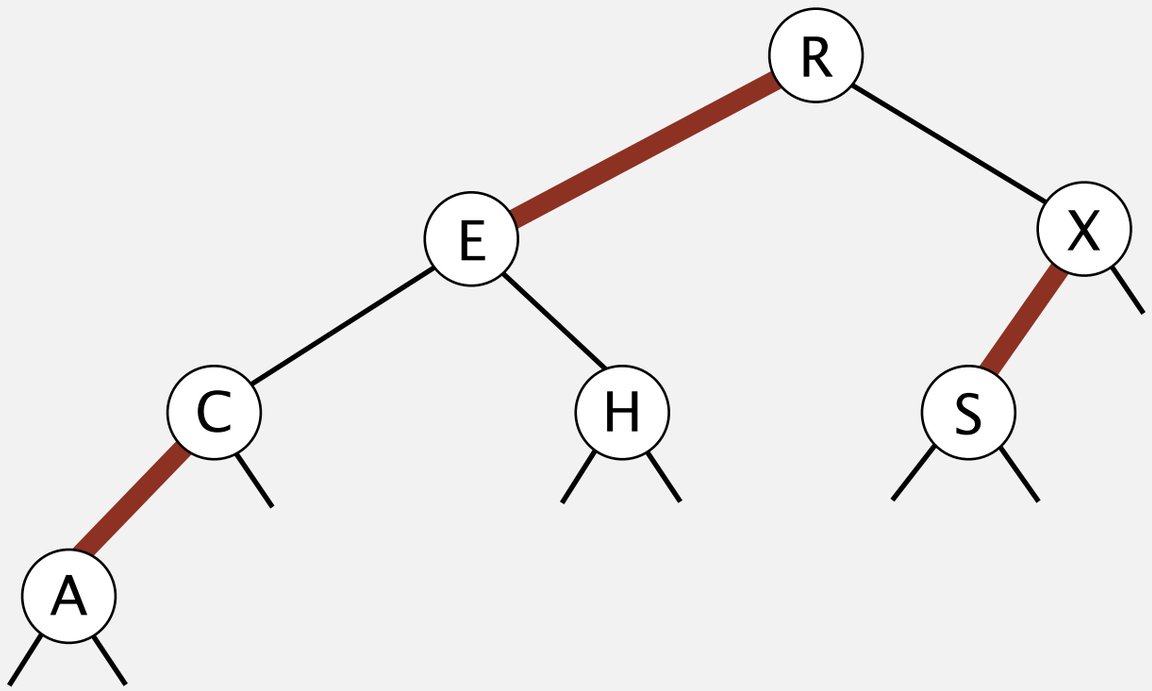
Red-black BST insertion

red-black BST



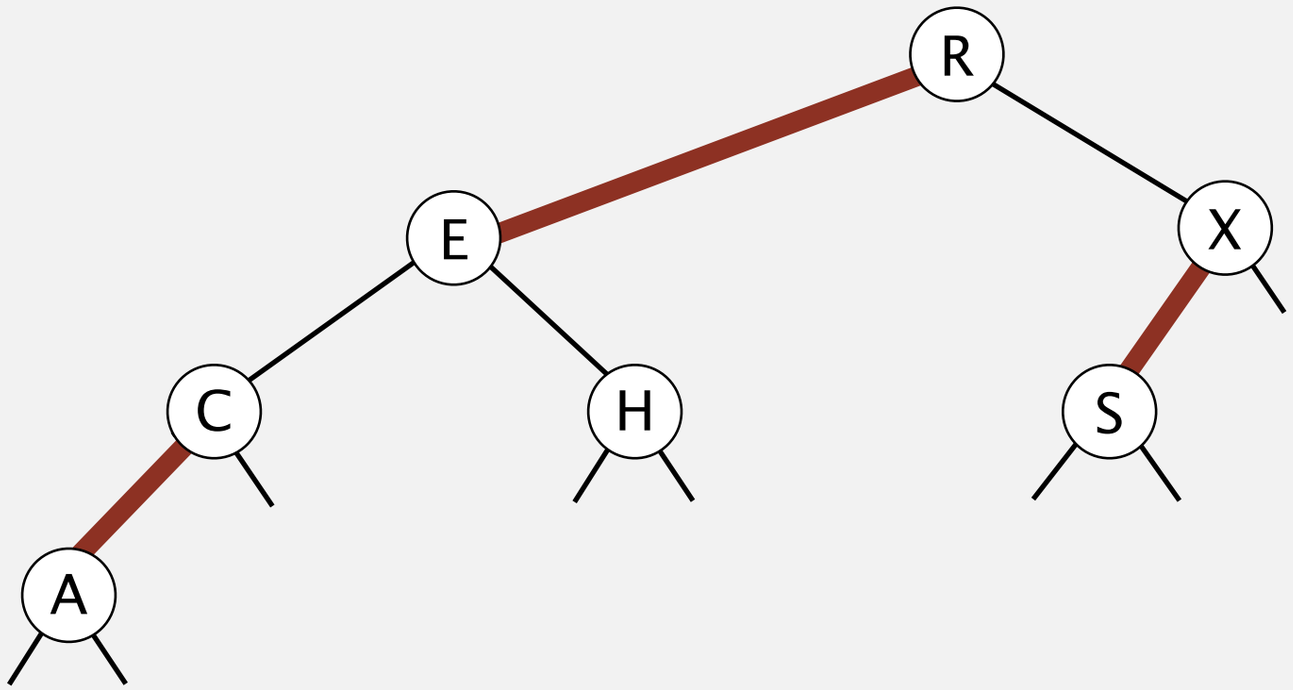
Red-black BST insertion

red-black BST



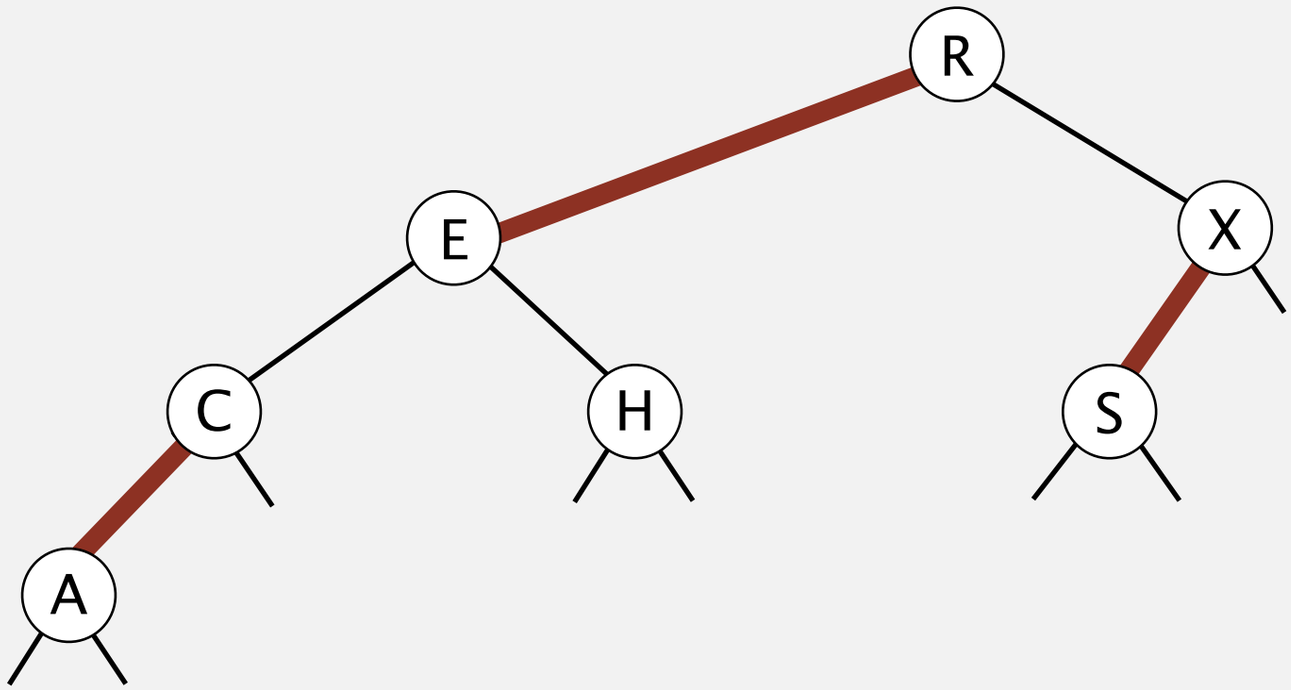
Red-black BST insertion

red-black BST



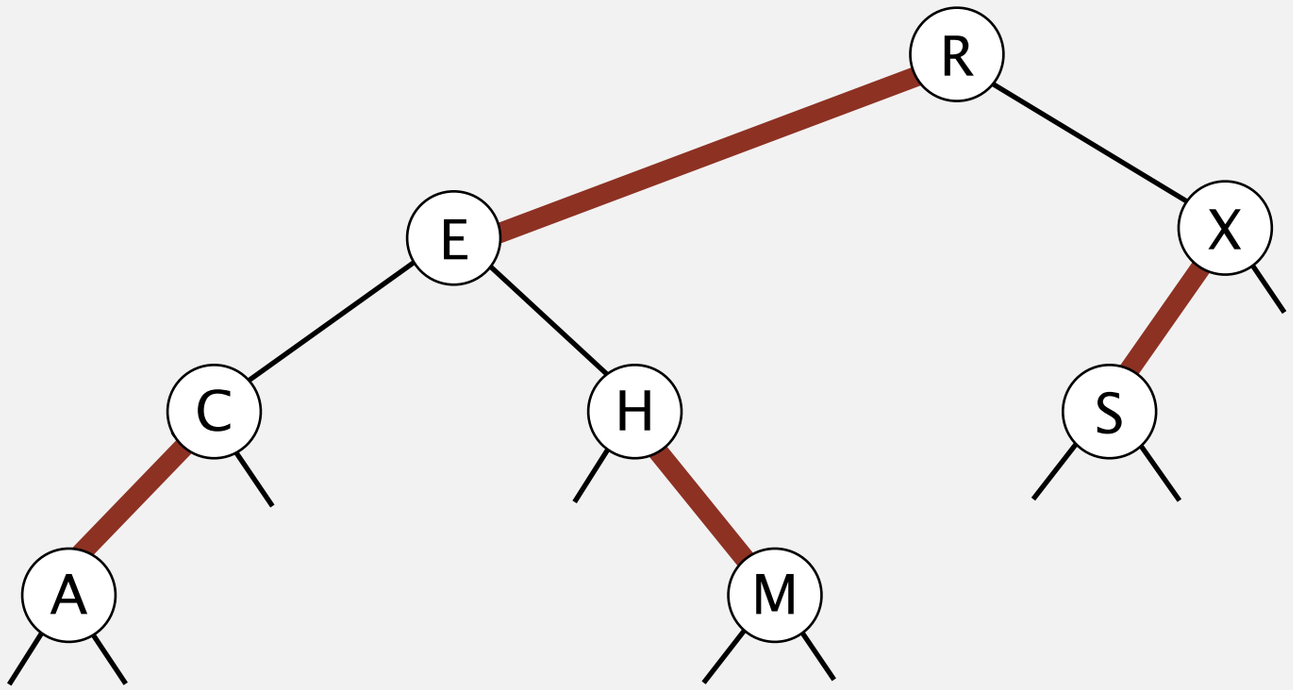
Red-black BST insertion

insert M



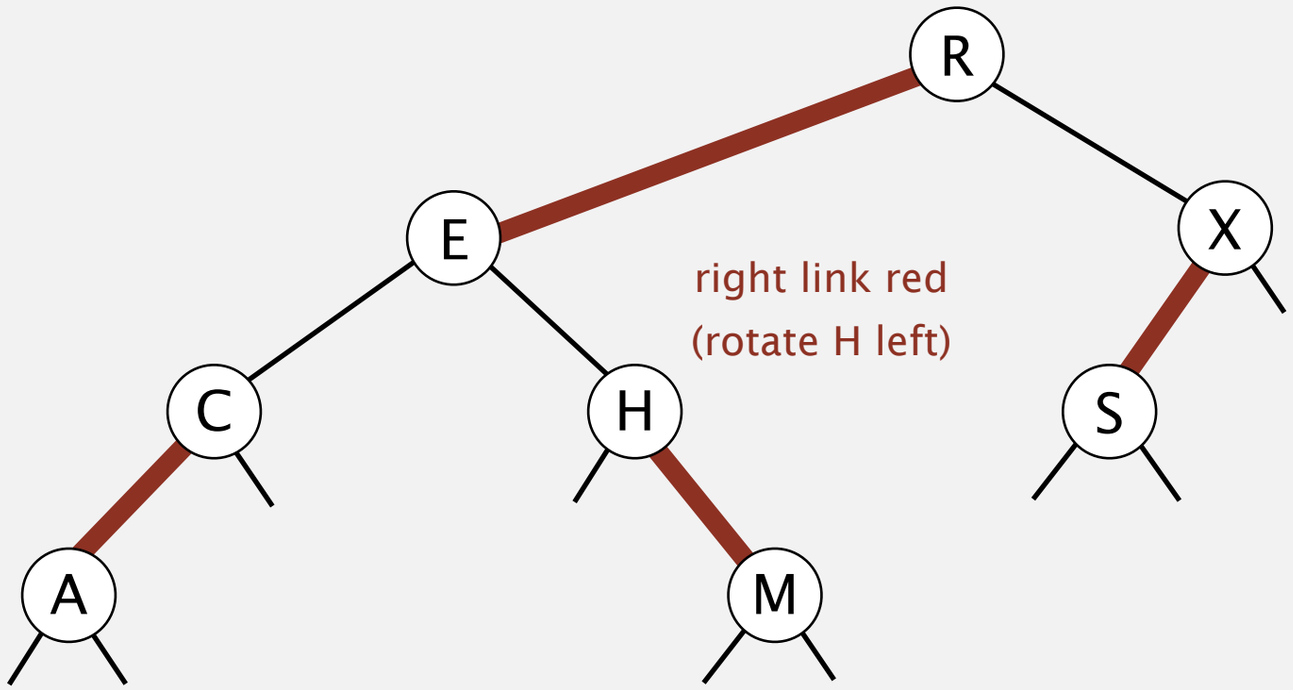
Red-black BST insertion

insert M



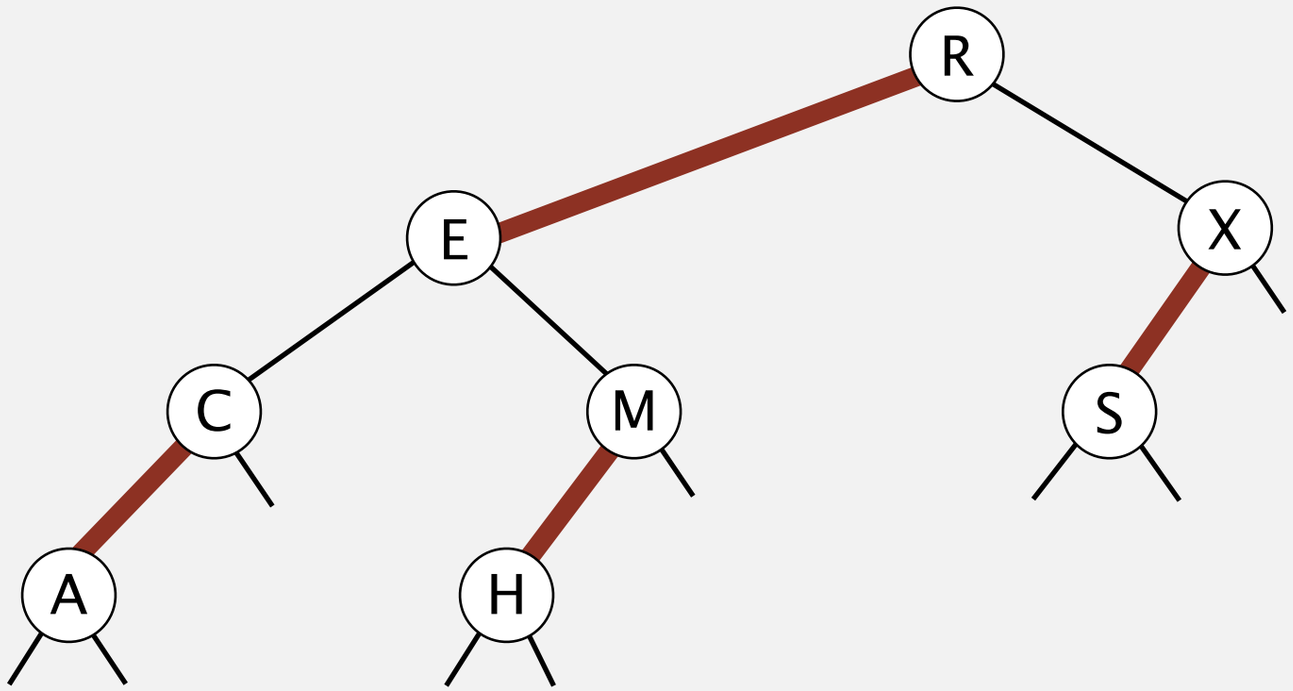
Red-black BST insertion

insert M



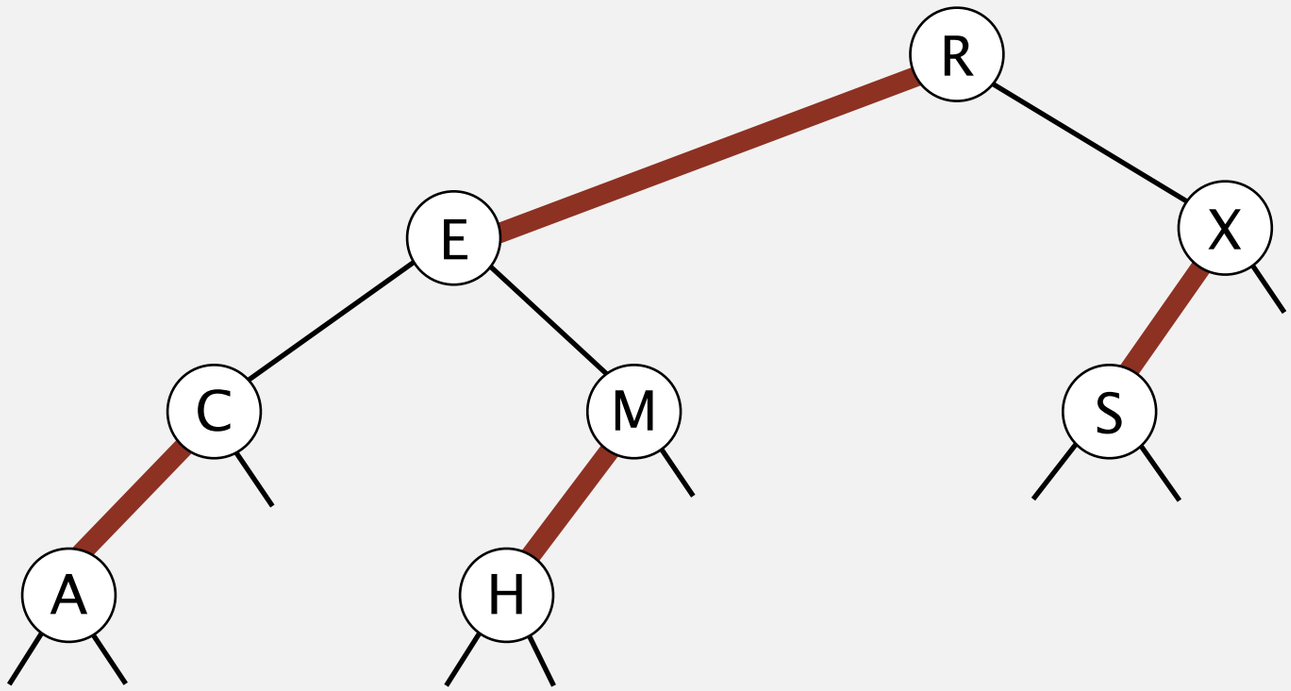
Red-black BST insertion

red-black BST



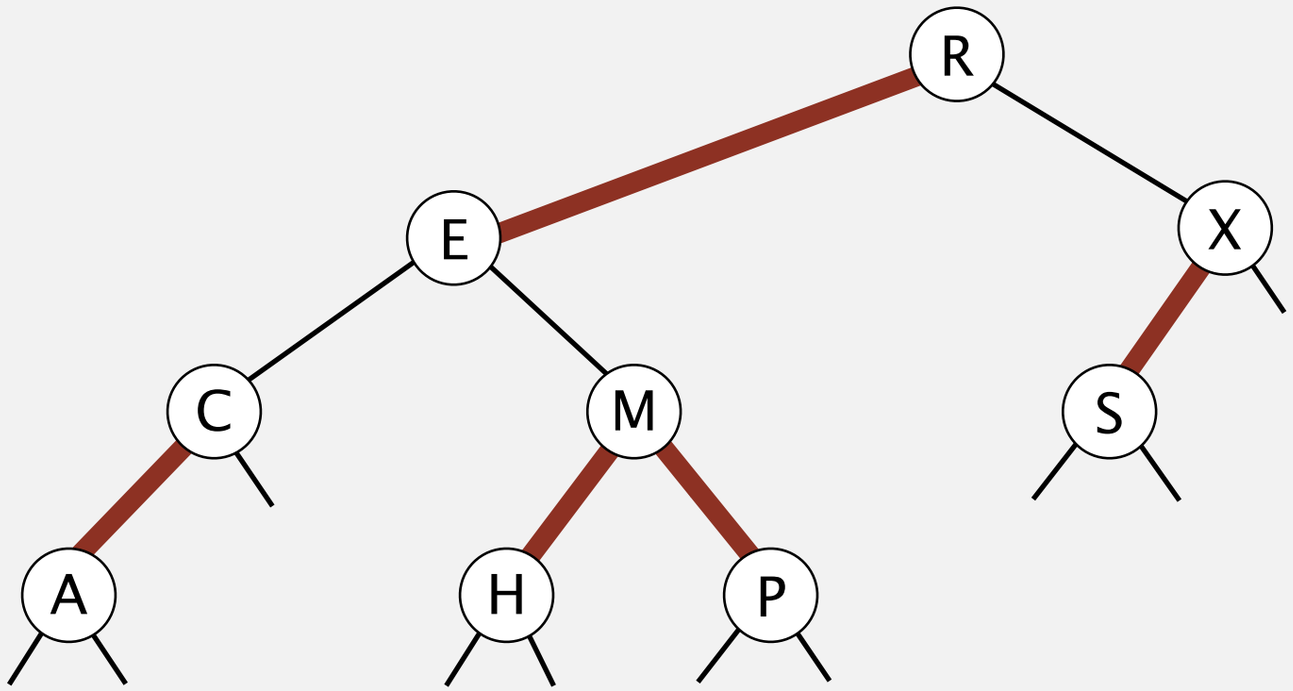
Red-black BST insertion

insert P



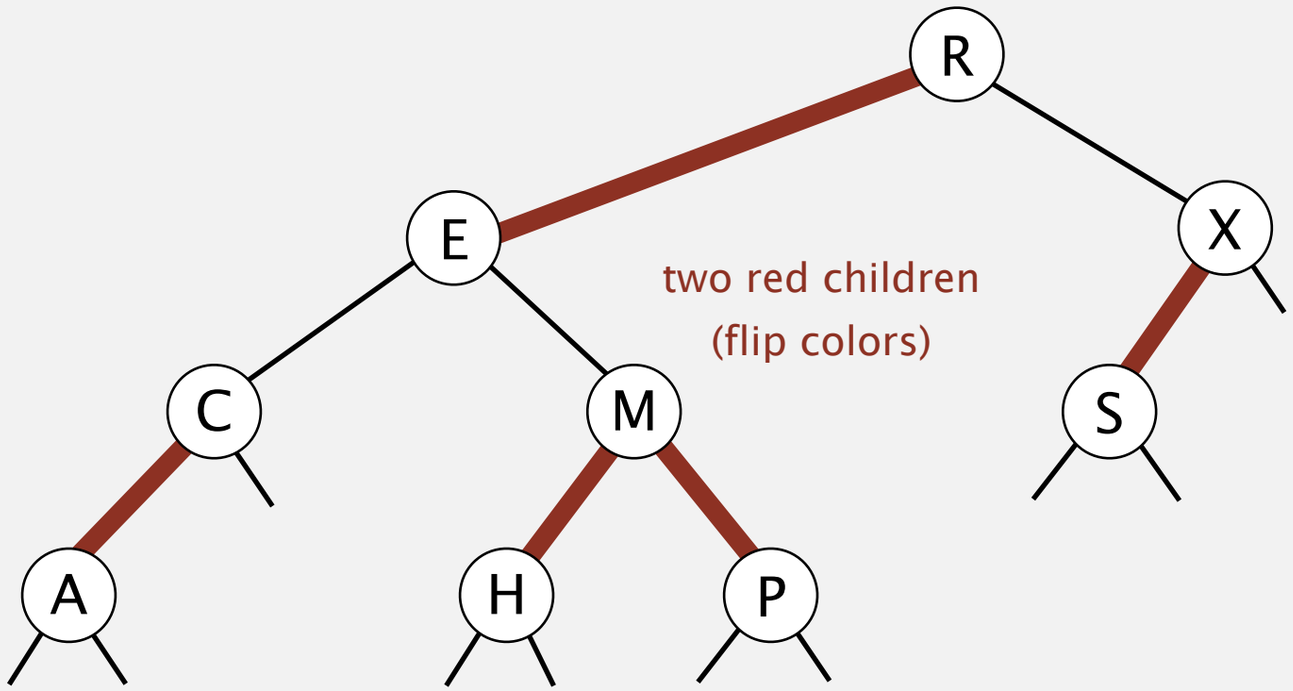
Red-black BST insertion

insert P



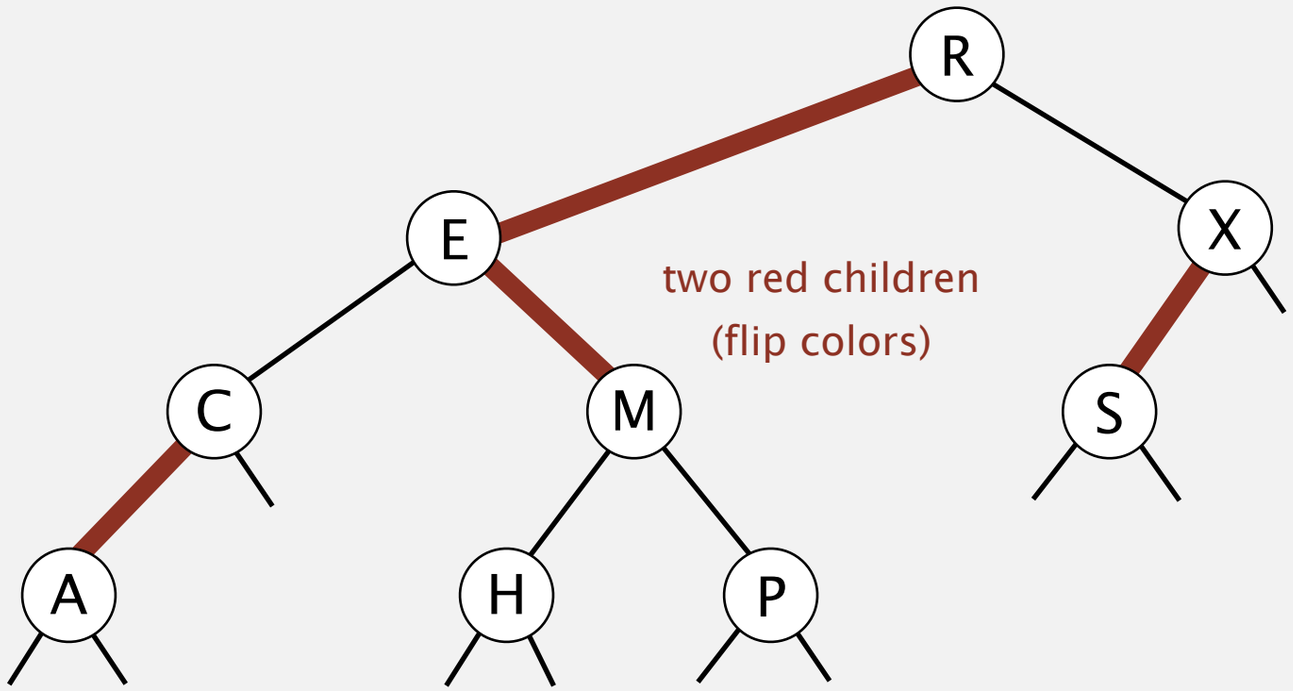
Red-black BST insertion

insert P

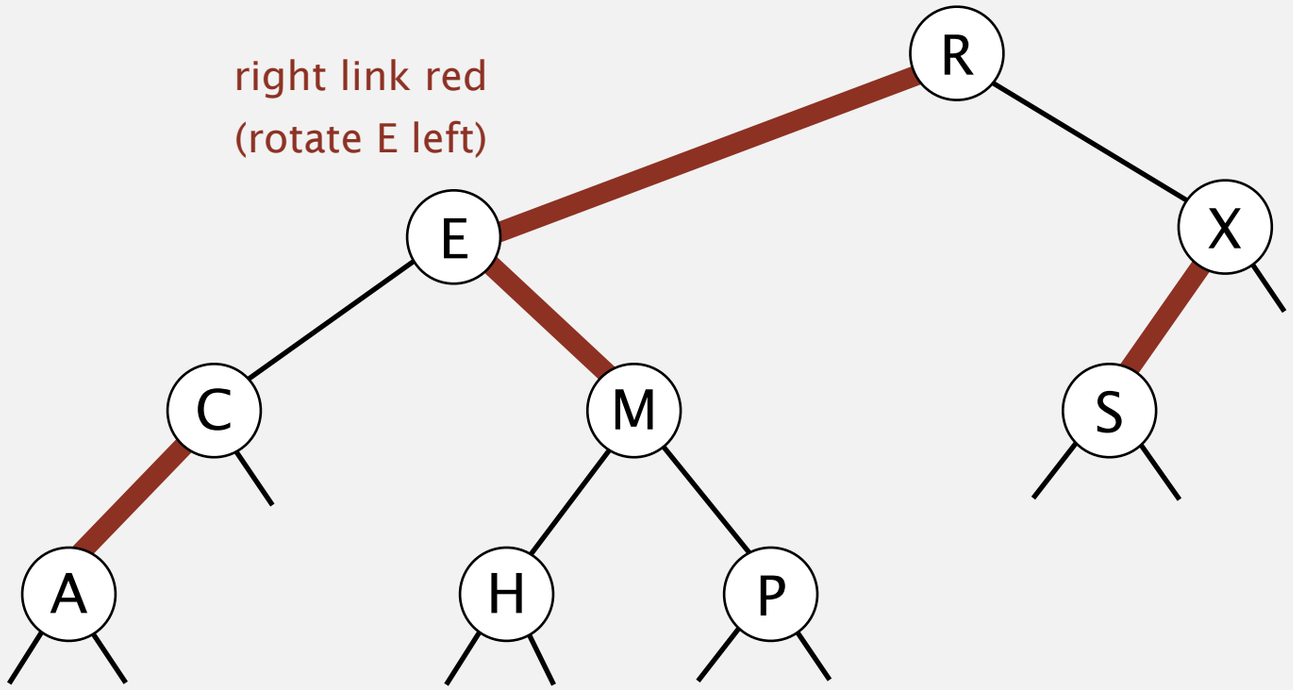


Red-black BST insertion

insert P



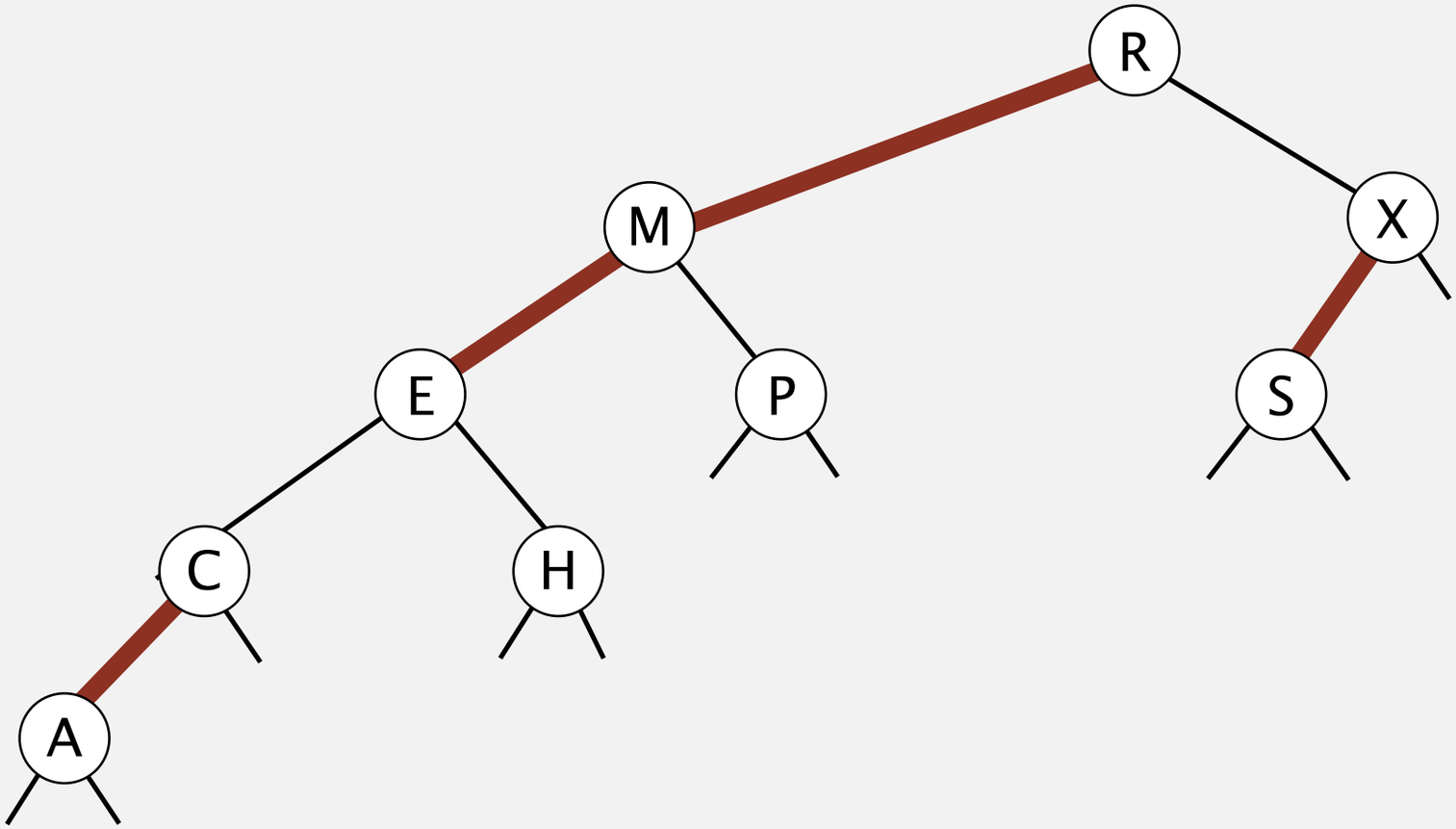
Red-black BST insertion



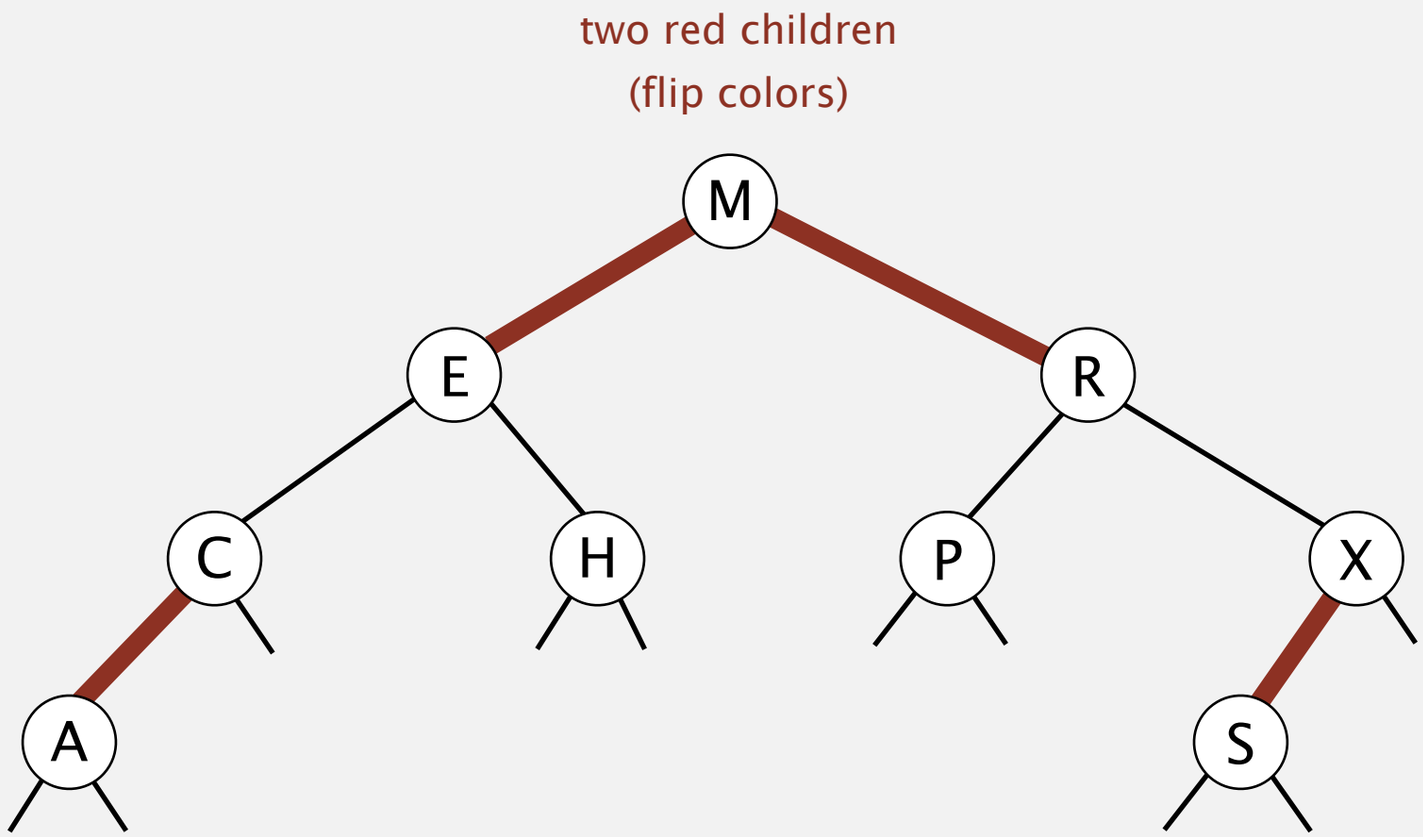
Red-black BST insertion

two left reds in a row

(rotate R right)



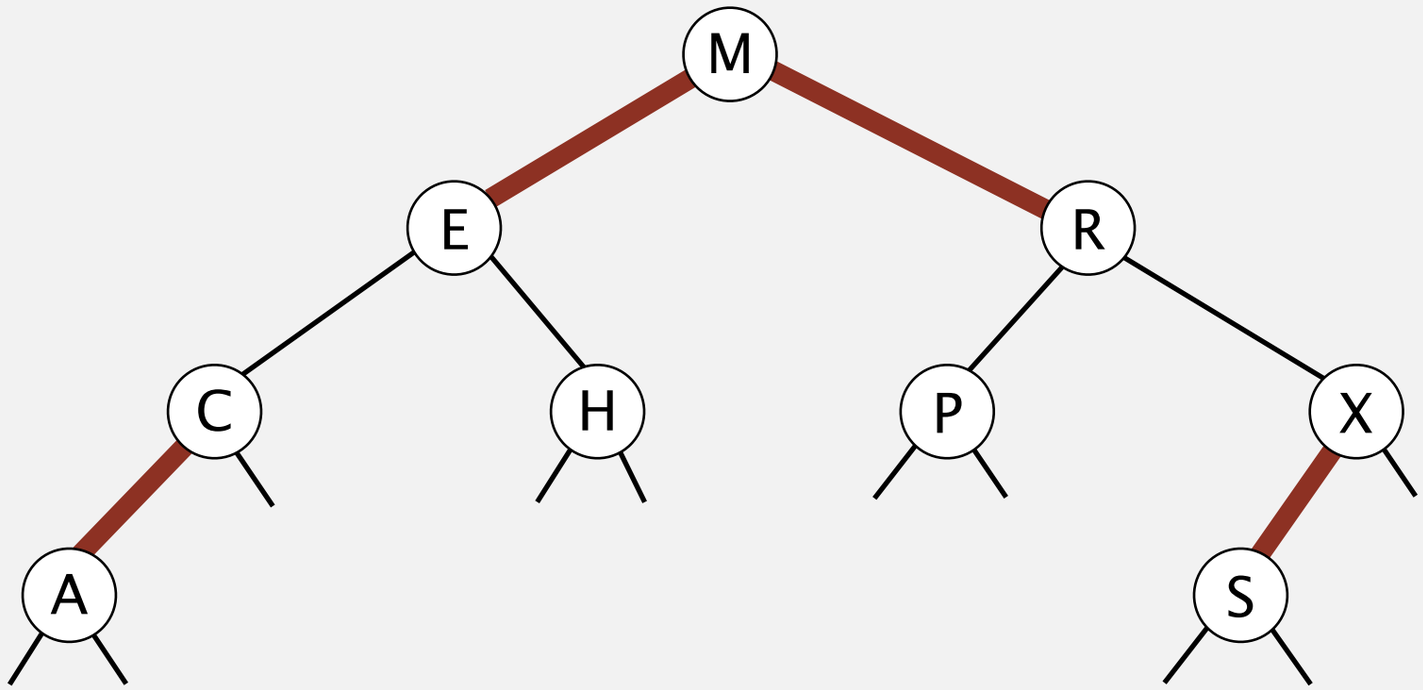
Red-black BST insertion



Red-black BST insertion

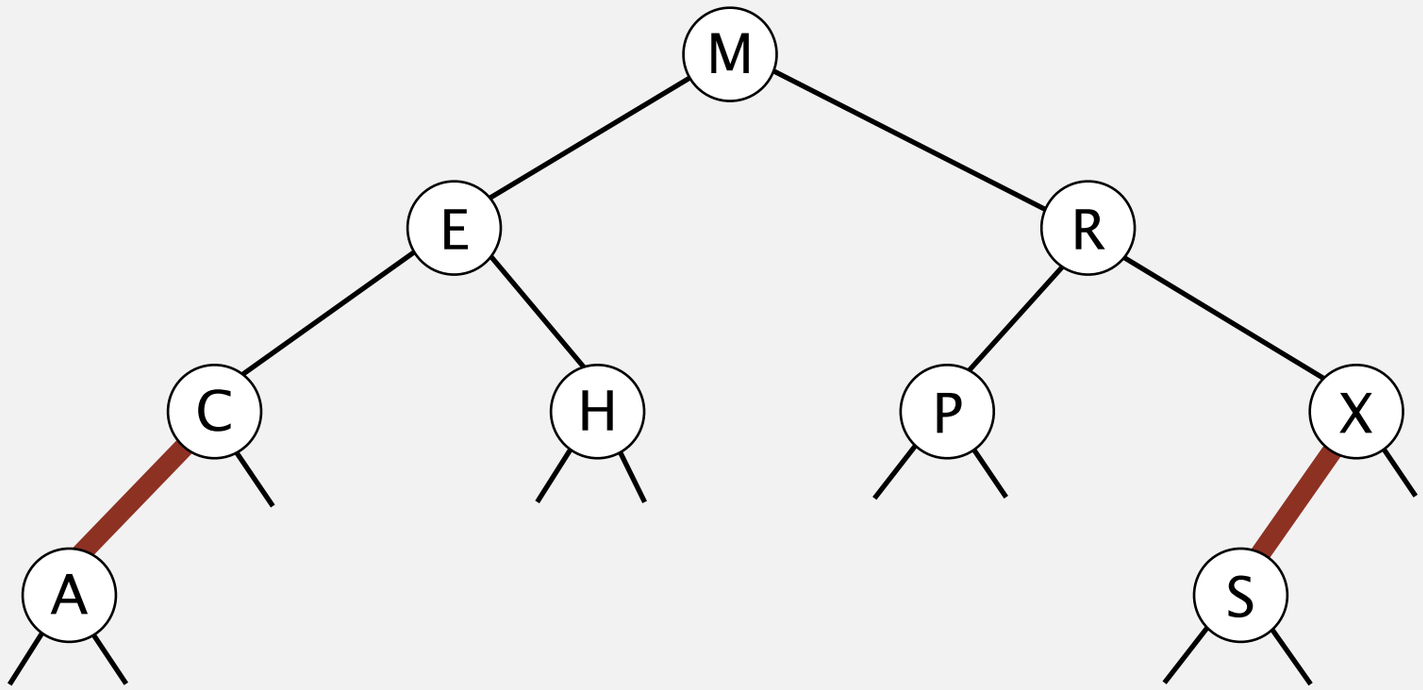
two red children

(flip colors)



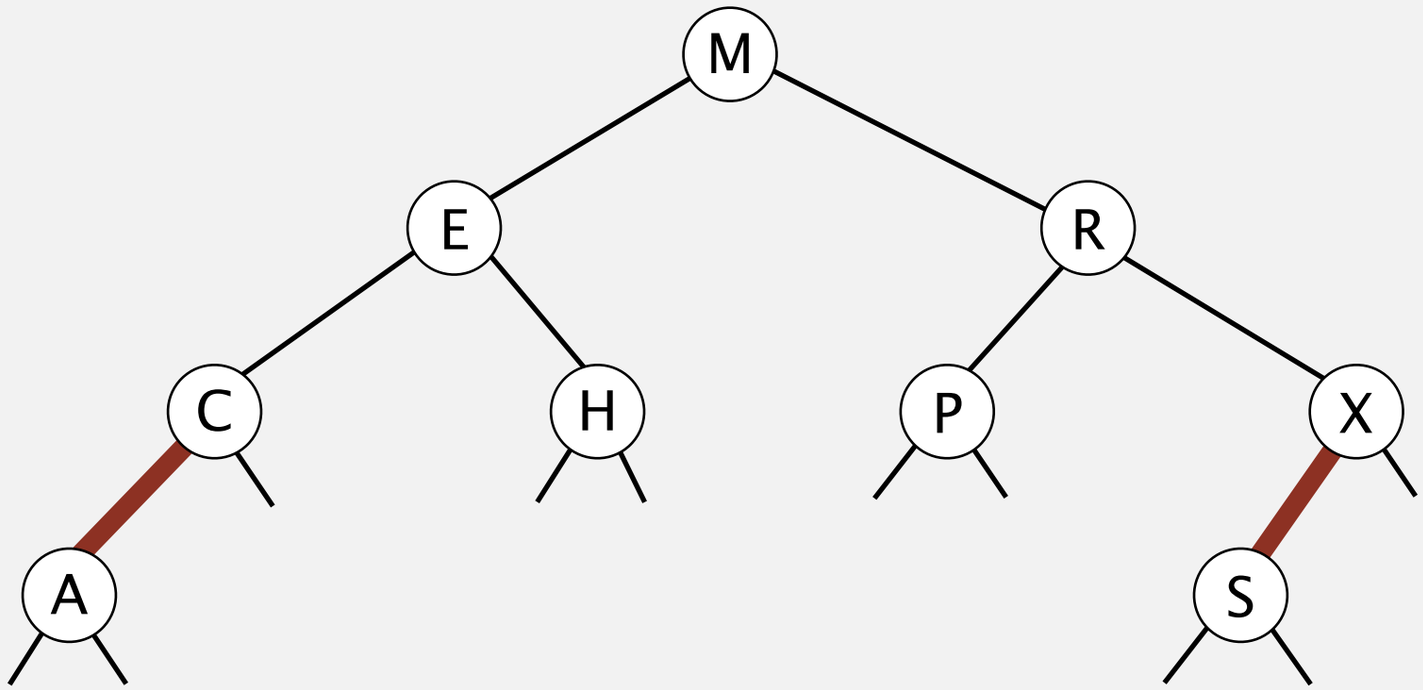
Red-black BST insertion

red-black BST



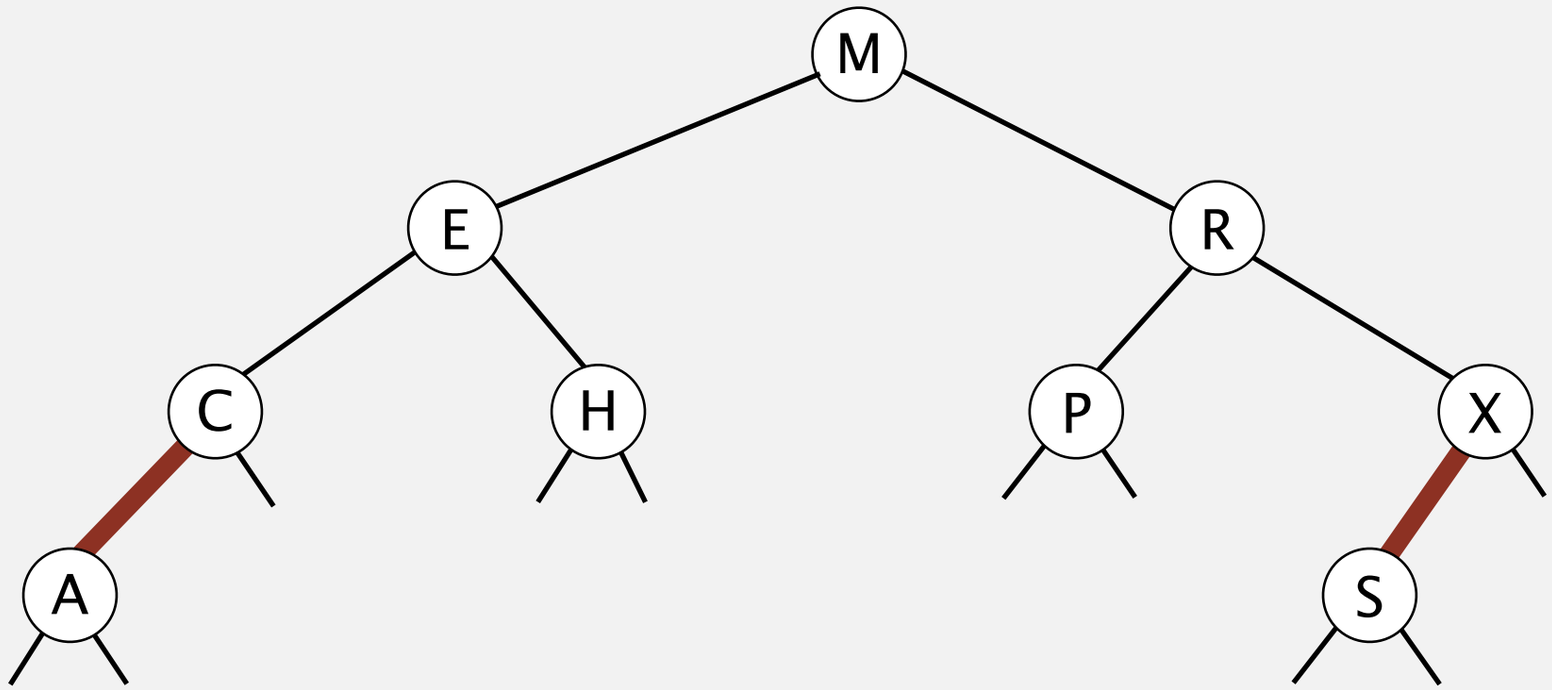
Red-black BST insertion

red-black BST



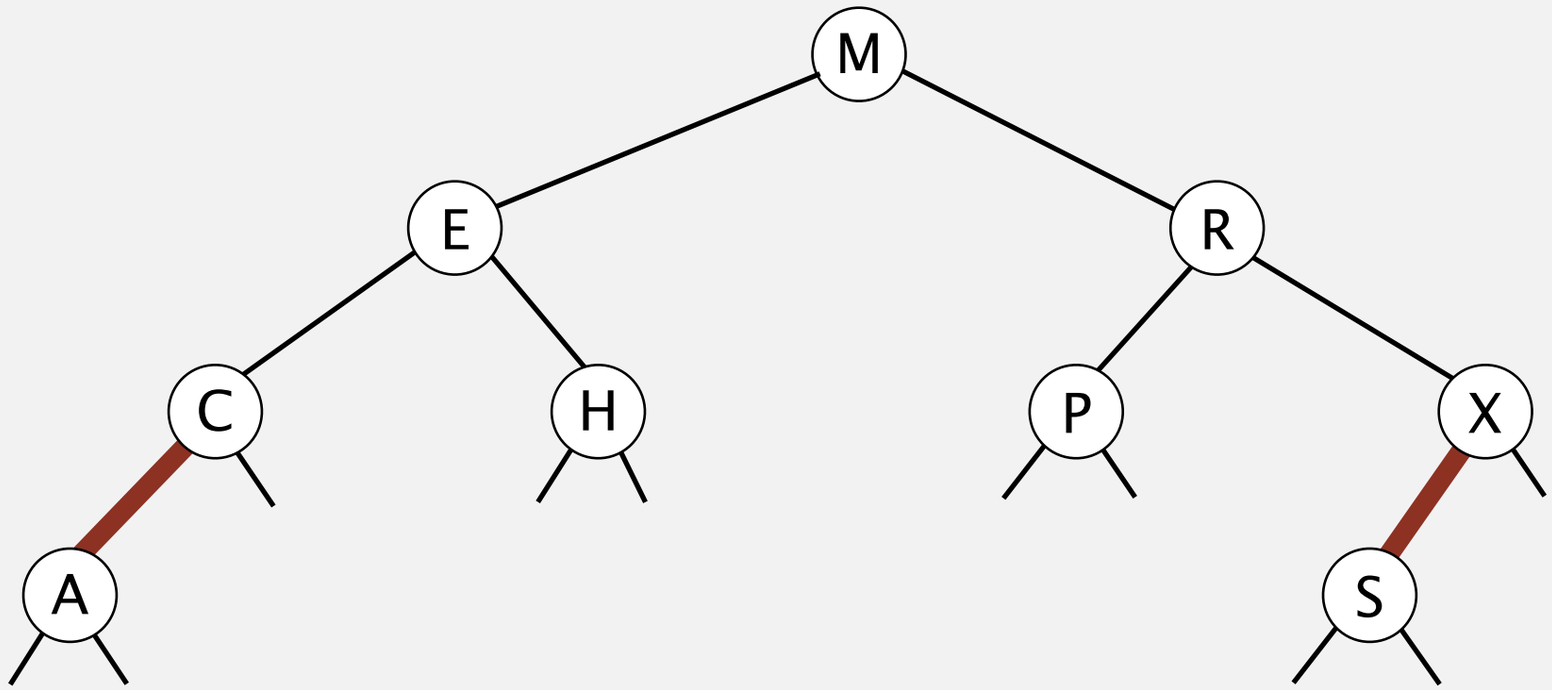
Red-black BST insertion

red-black BST



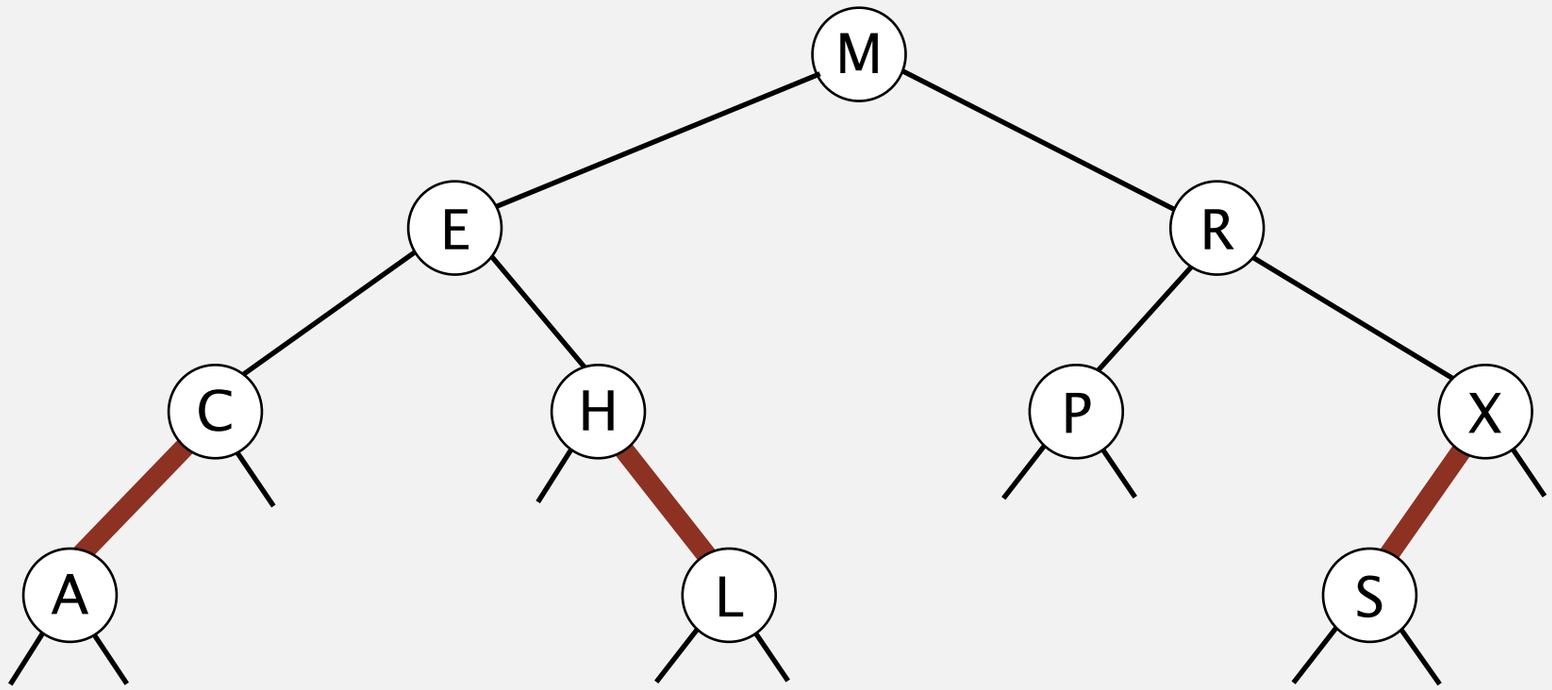
Red-black BST insertion

insert L



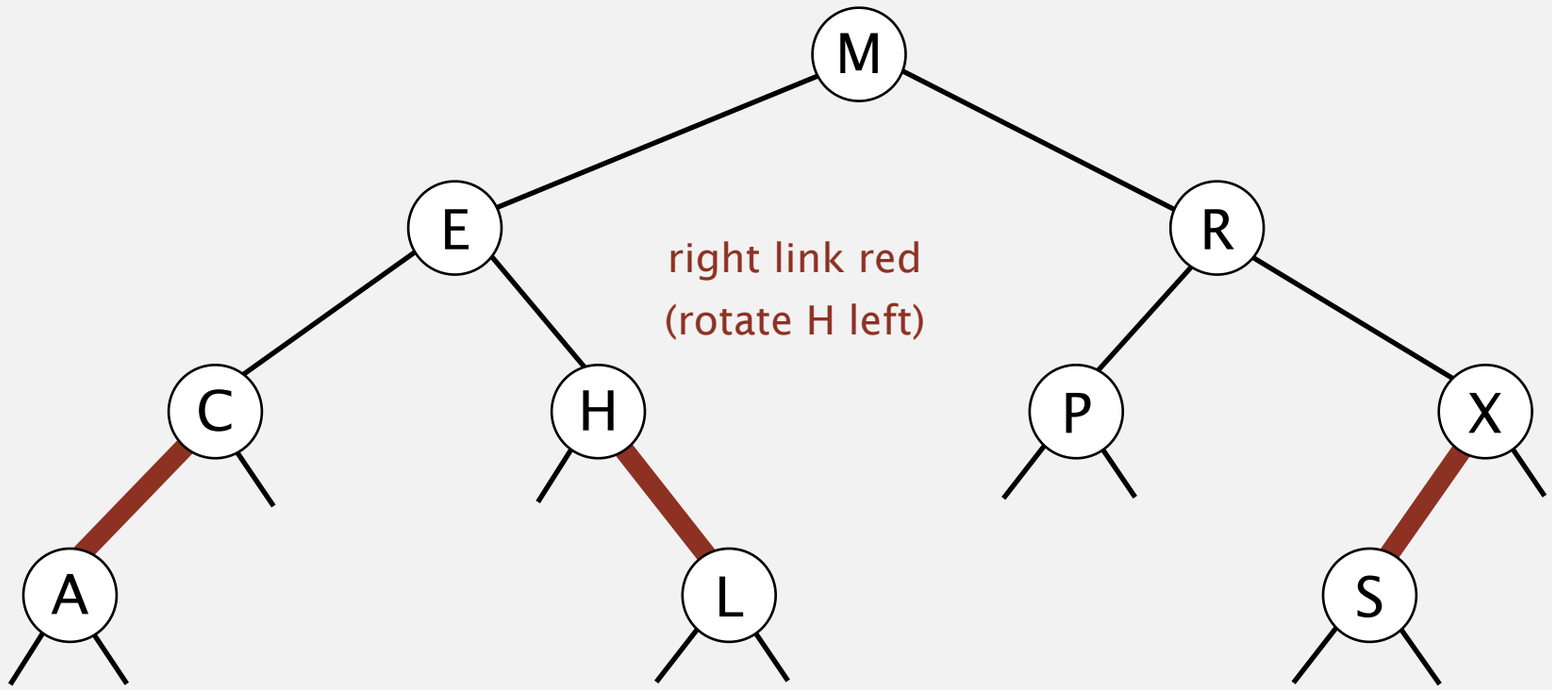
Red-black BST insertion

insert L



Red-black BST insertion

insert L



Red-black BST insertion

red-black BST