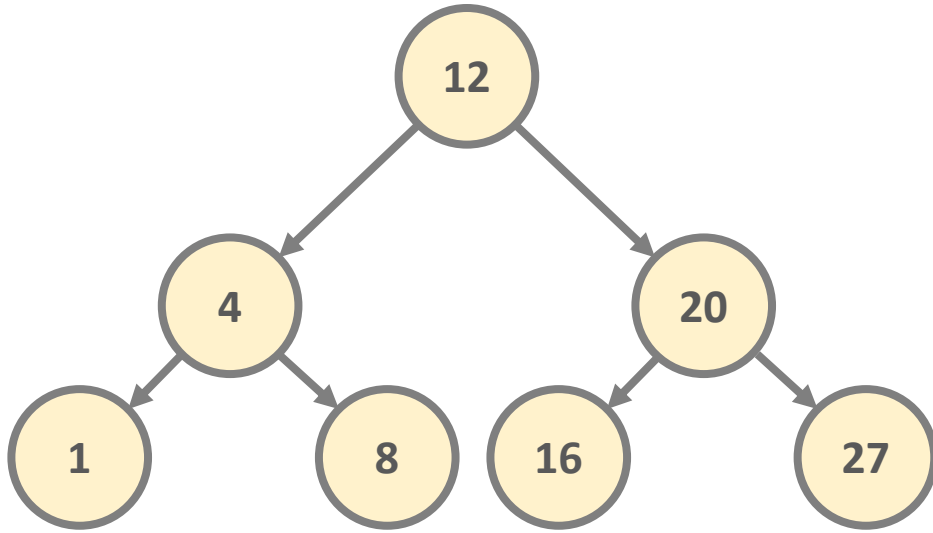


Stack Memory Visualization

(Algorithmic Problems)

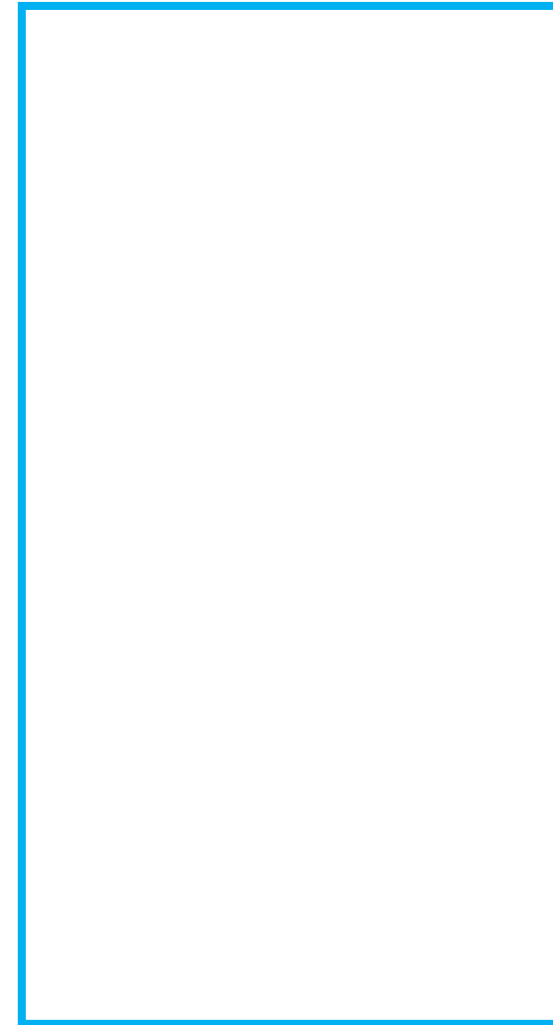
Binary Search Trees



max(node):

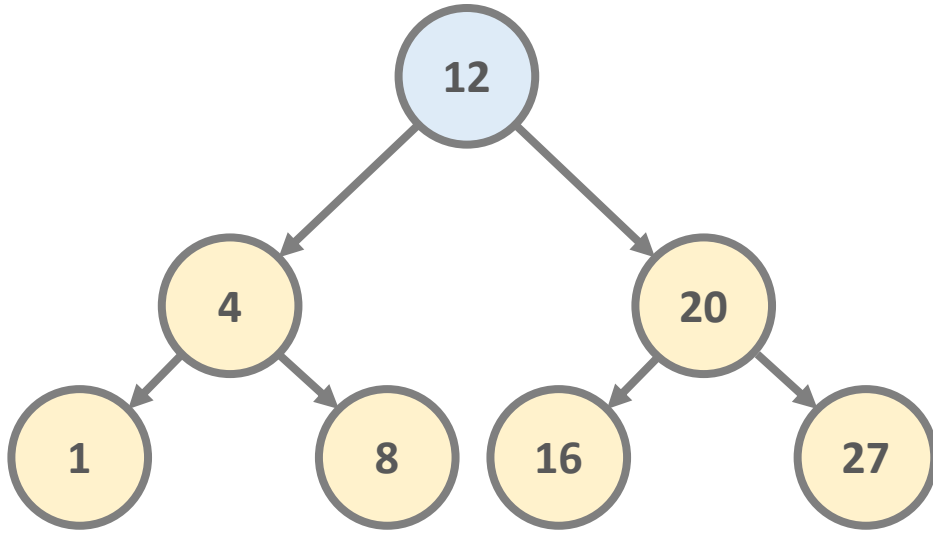
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

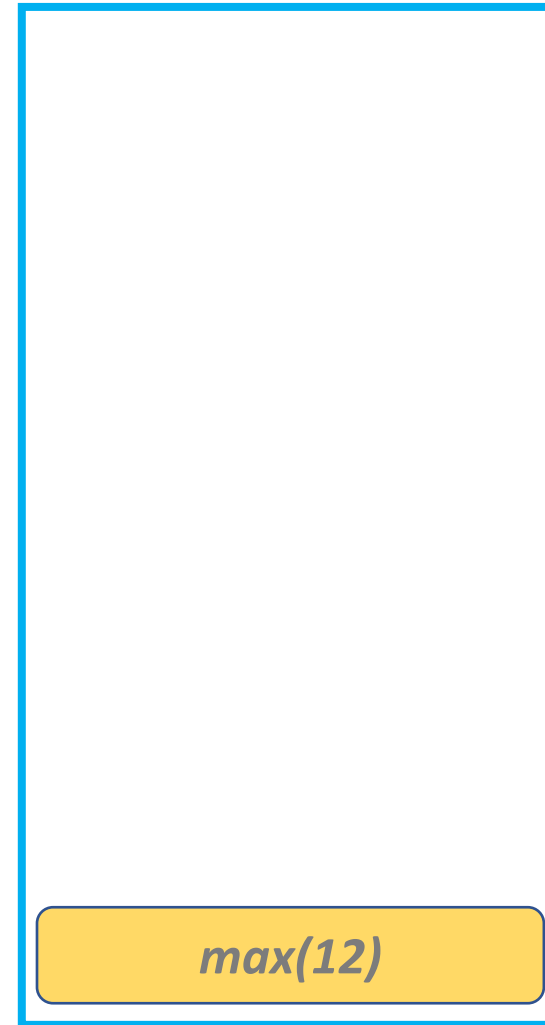
Binary Search Trees



max(node):

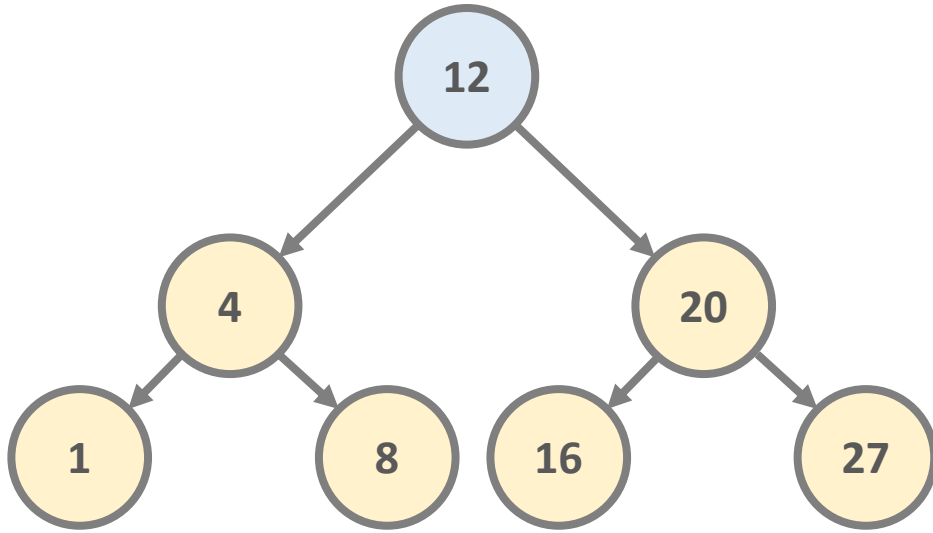
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

Binary Search Trees



max(node):

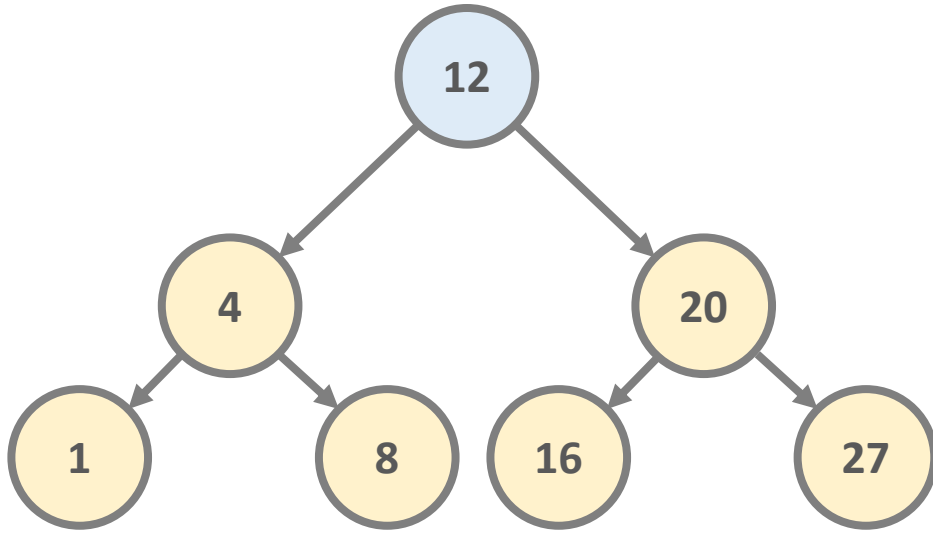
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

Binary Search Trees



max(node):

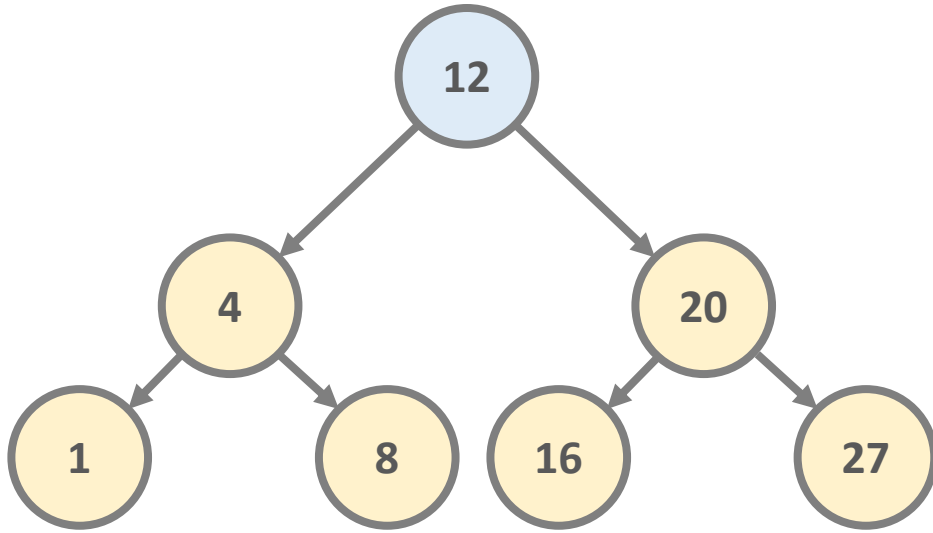
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

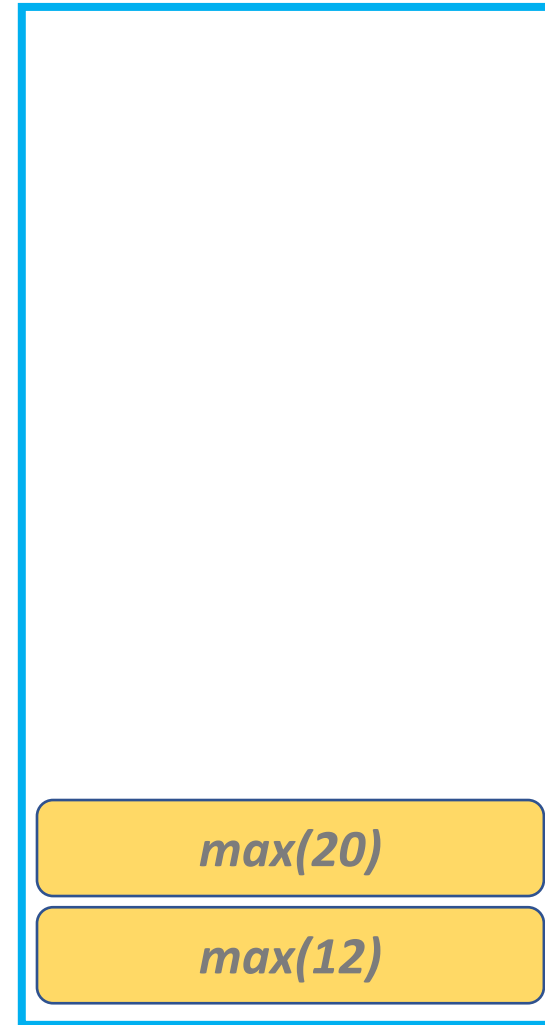
Binary Search Trees



max(node):

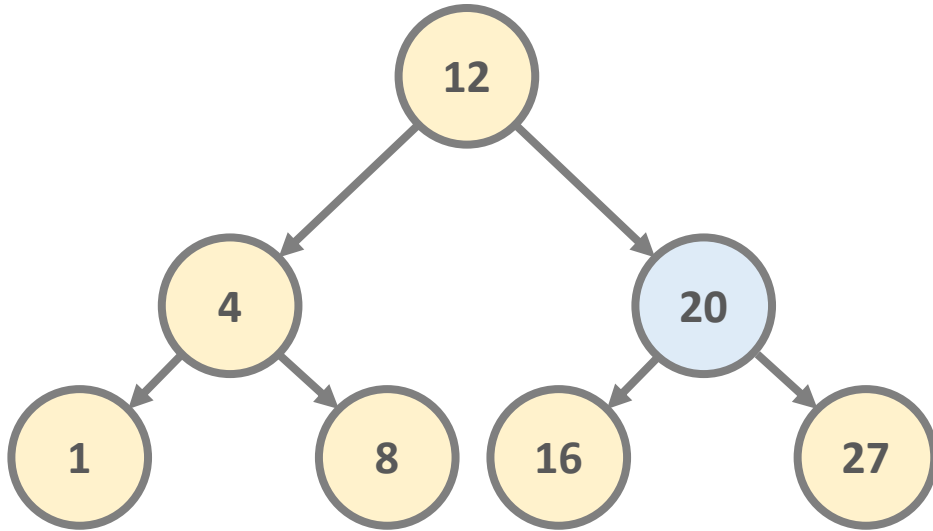
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

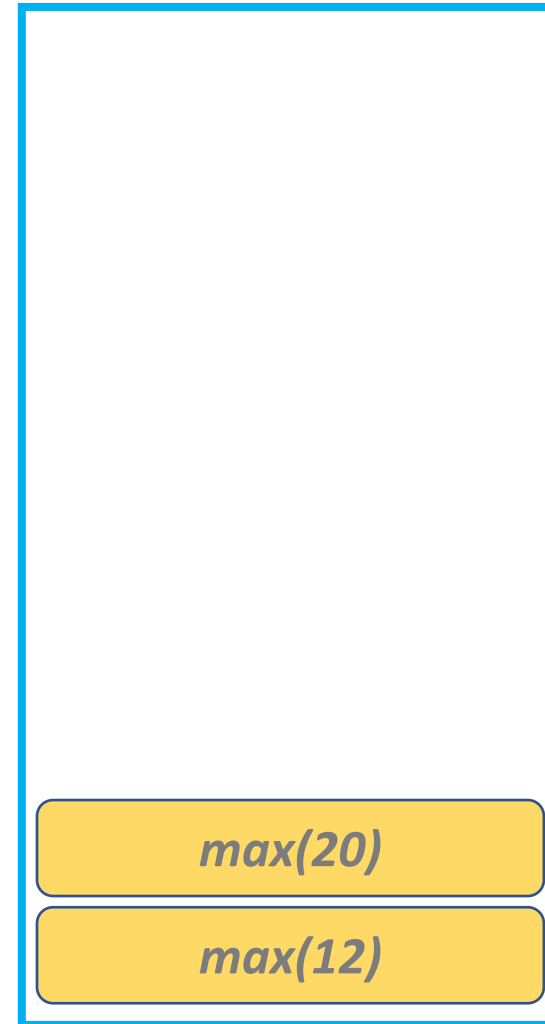
Binary Search Trees



max(node):

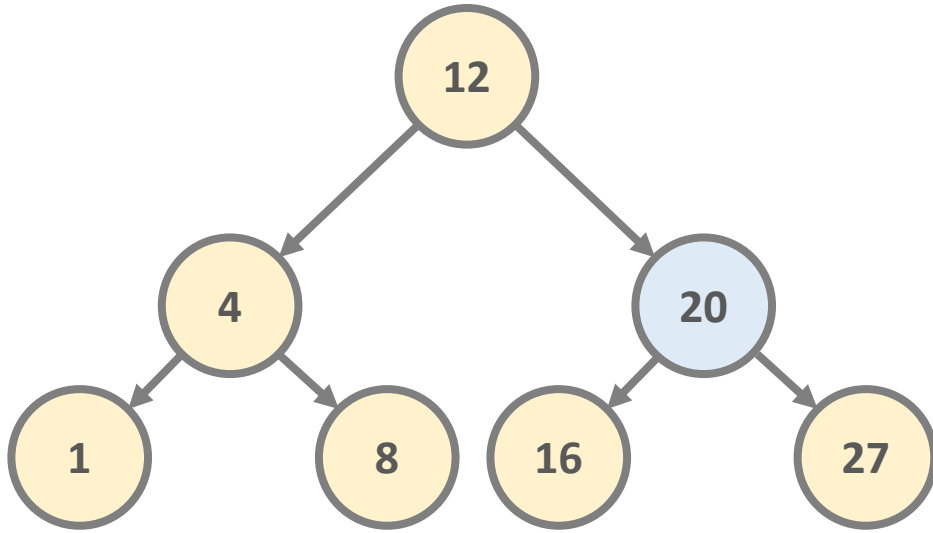
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

Binary Search Trees



max(node):

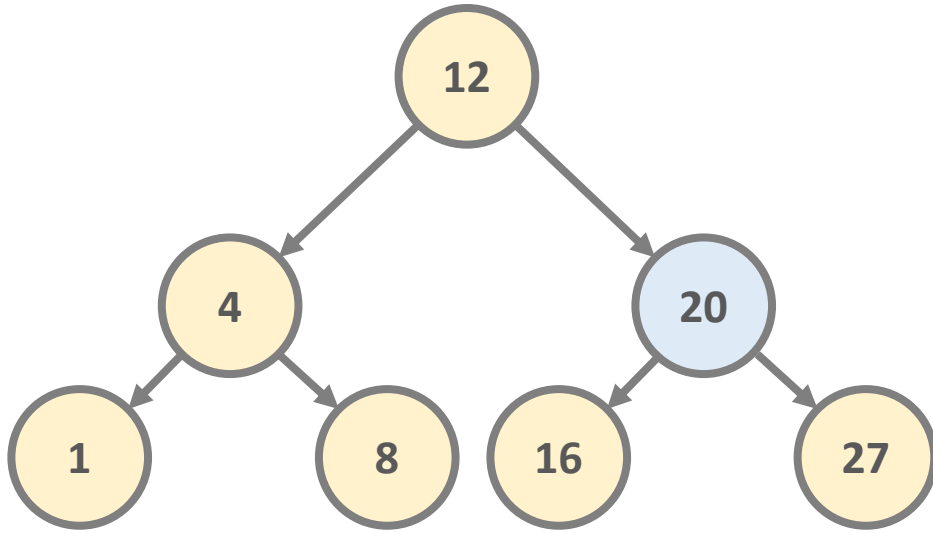
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

Binary Search Trees



max(node):

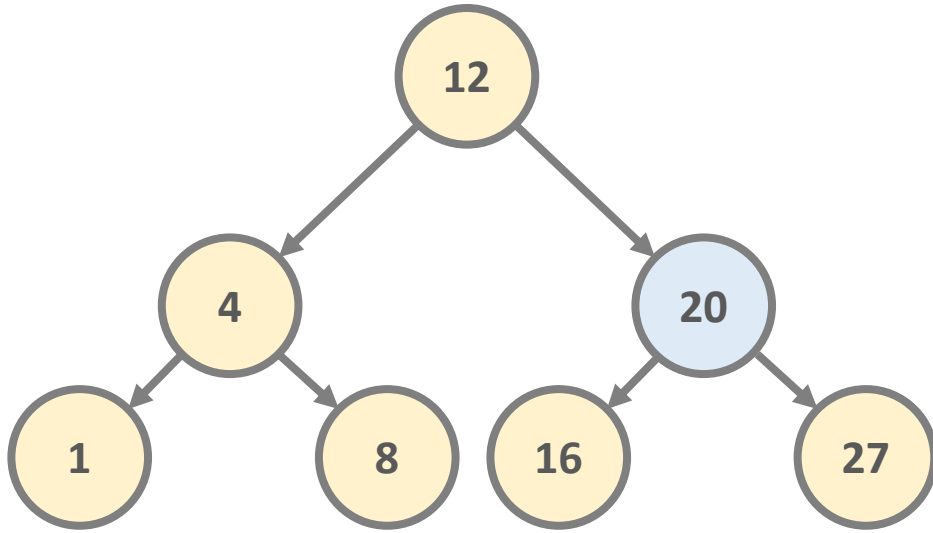
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

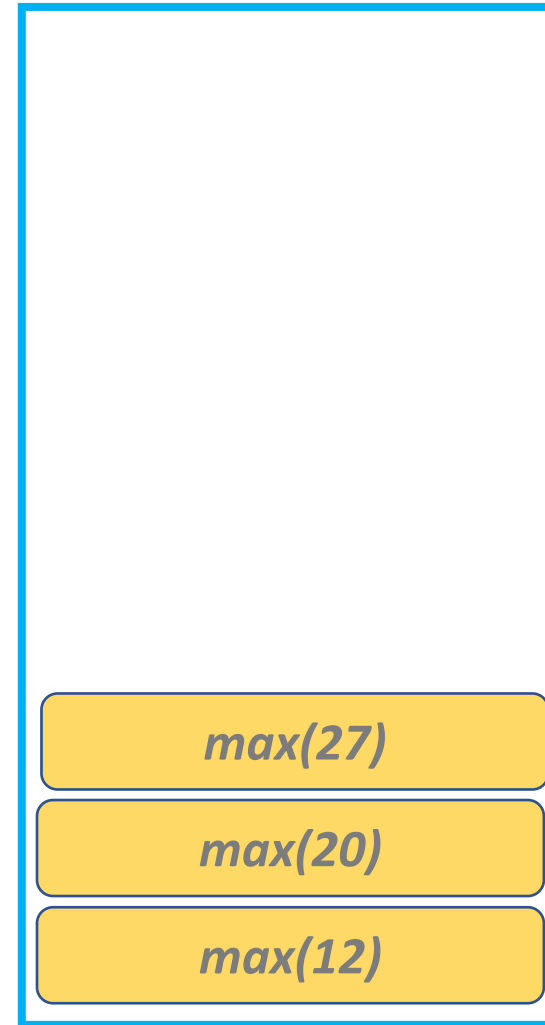
Binary Search Trees



max(node):

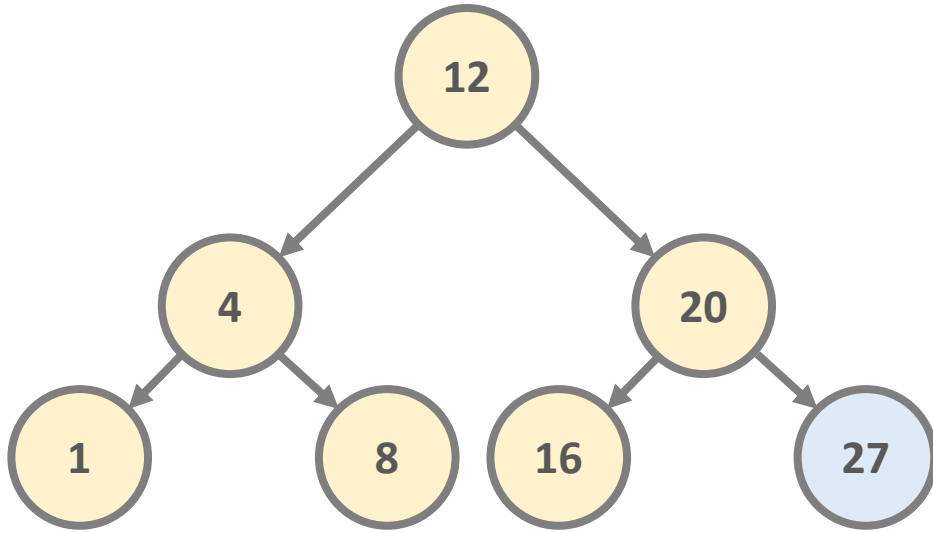
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

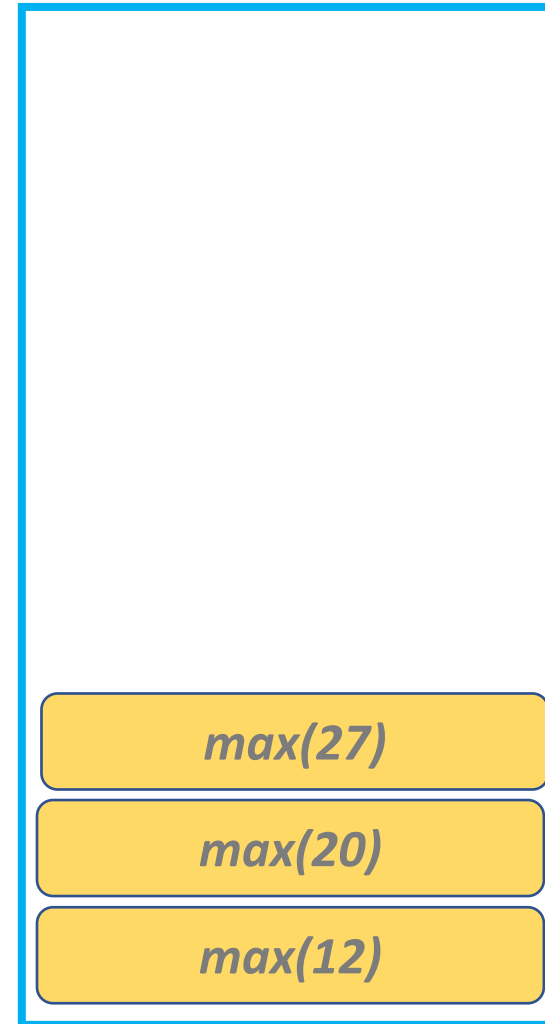
Binary Search Trees



max(node):

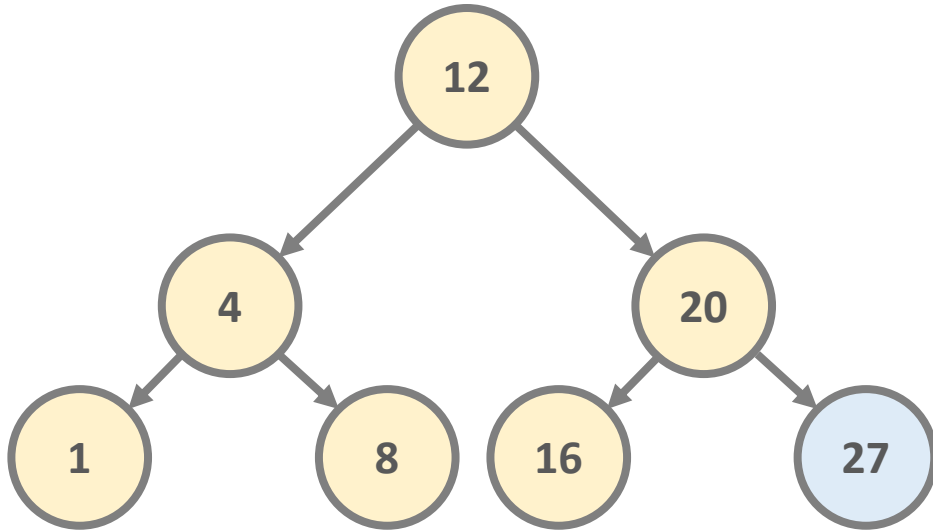
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

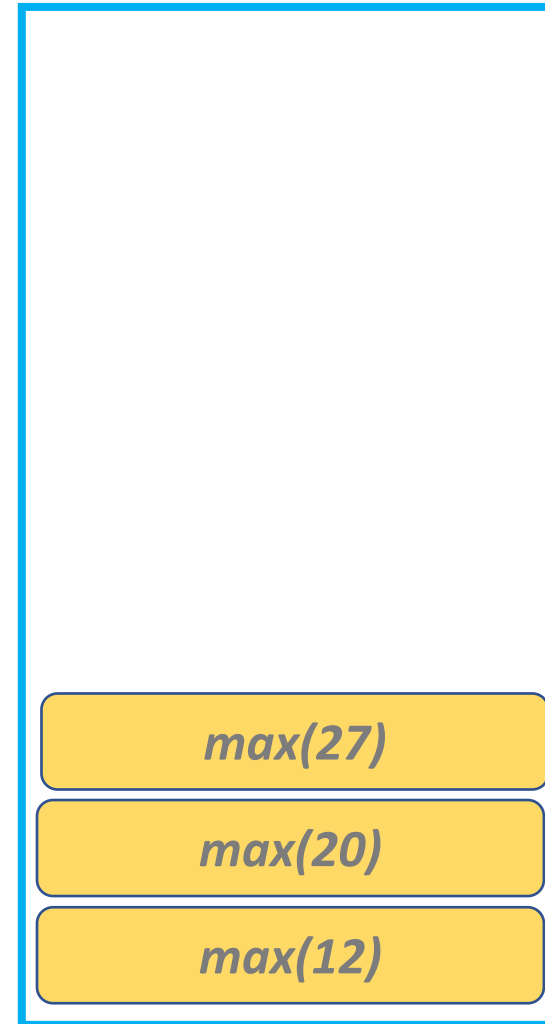
Binary Search Trees



max(node):

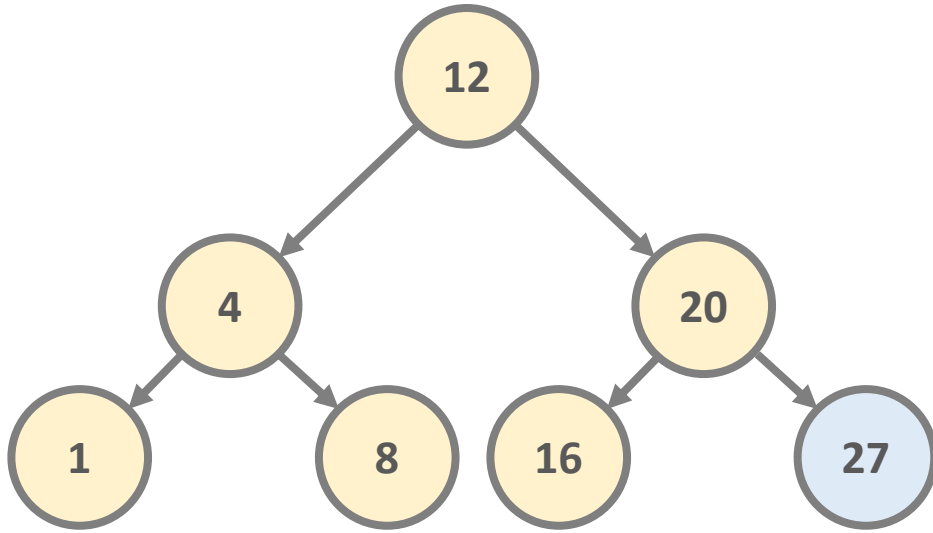
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

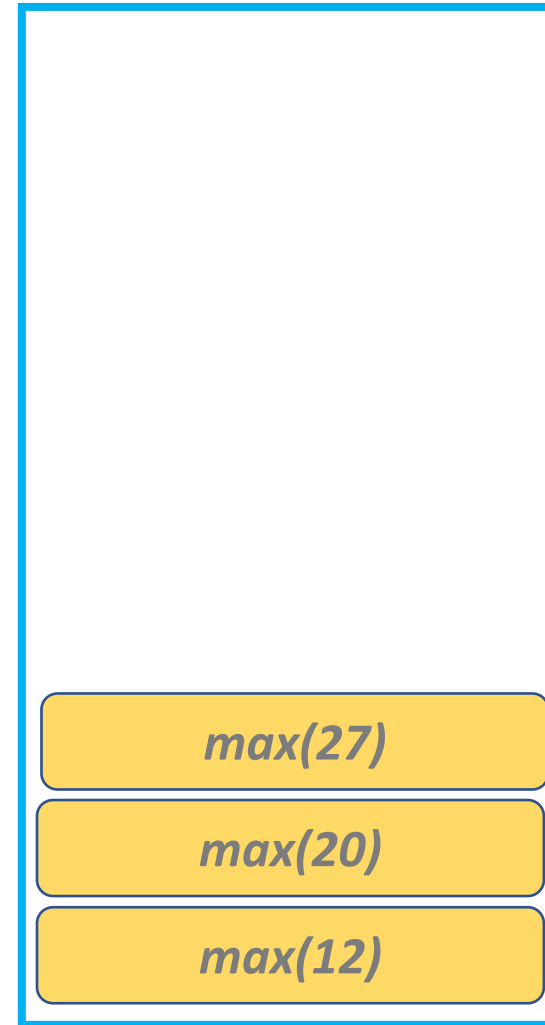
Binary Search Trees



max(node):

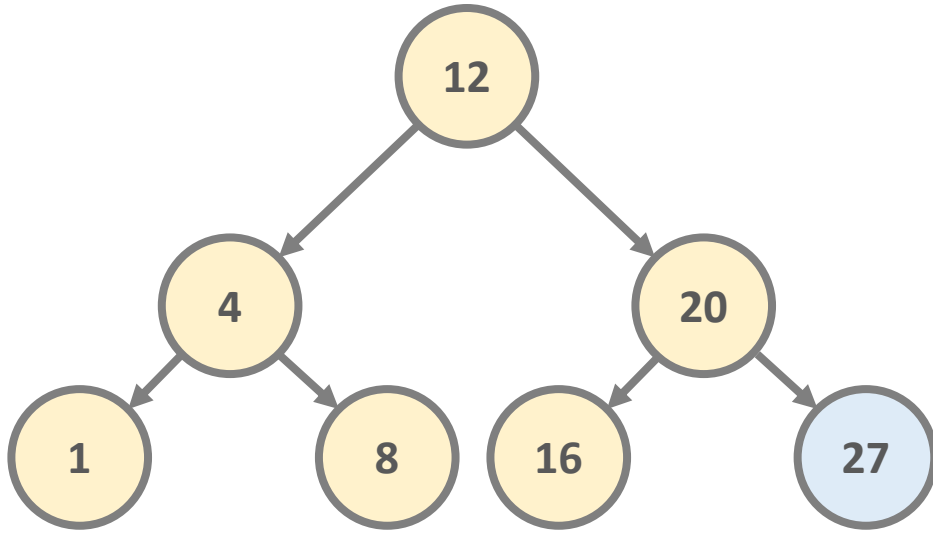
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

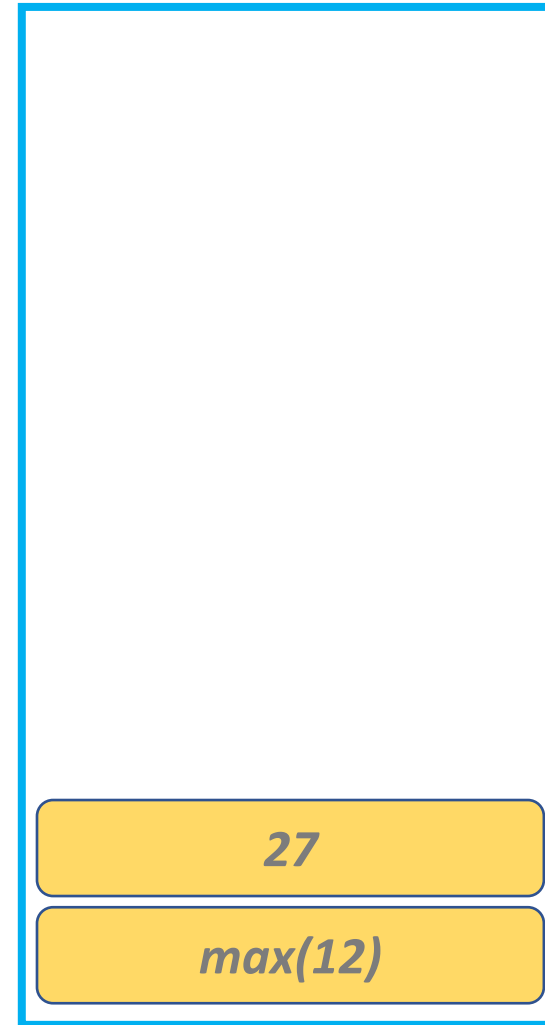
Binary Search Trees



max(node):

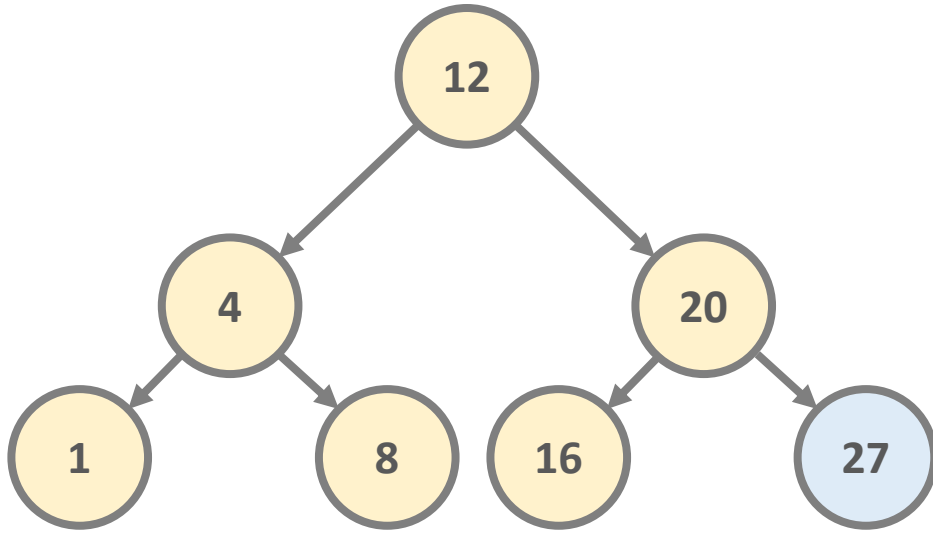
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

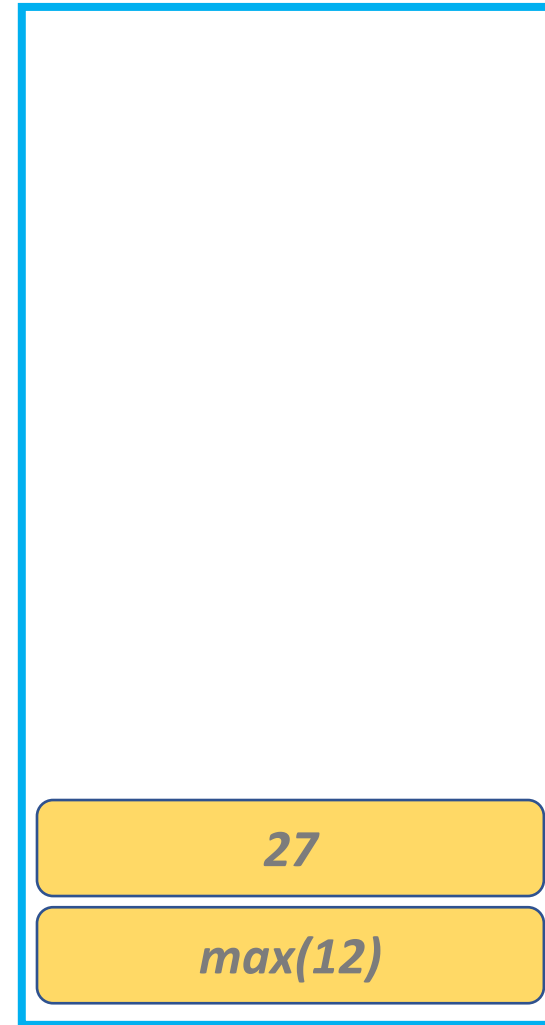
Binary Search Trees



max(node):

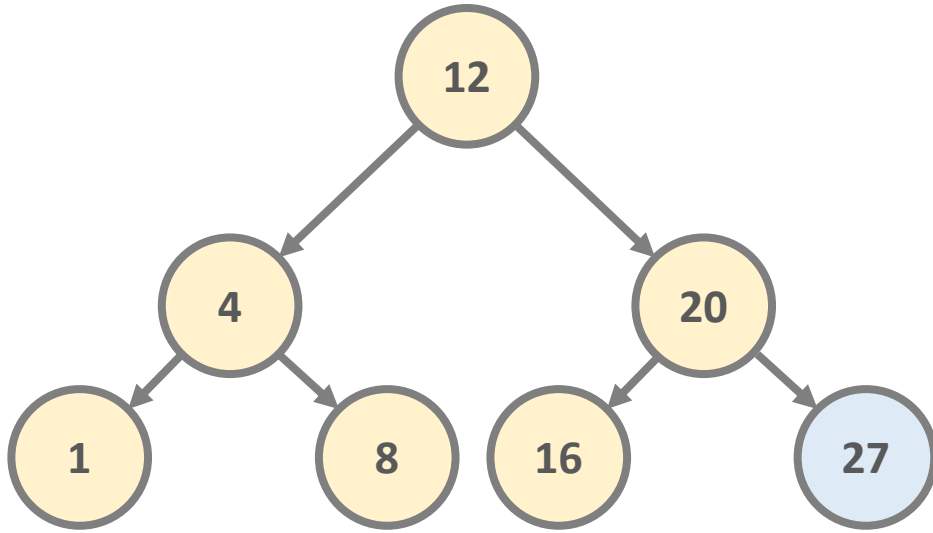
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

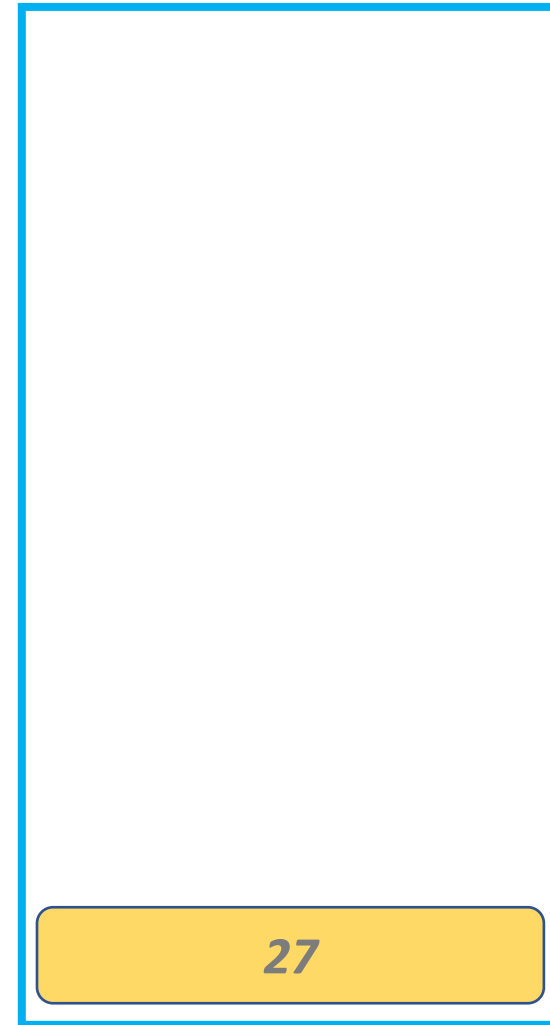
Binary Search Trees



max(node):

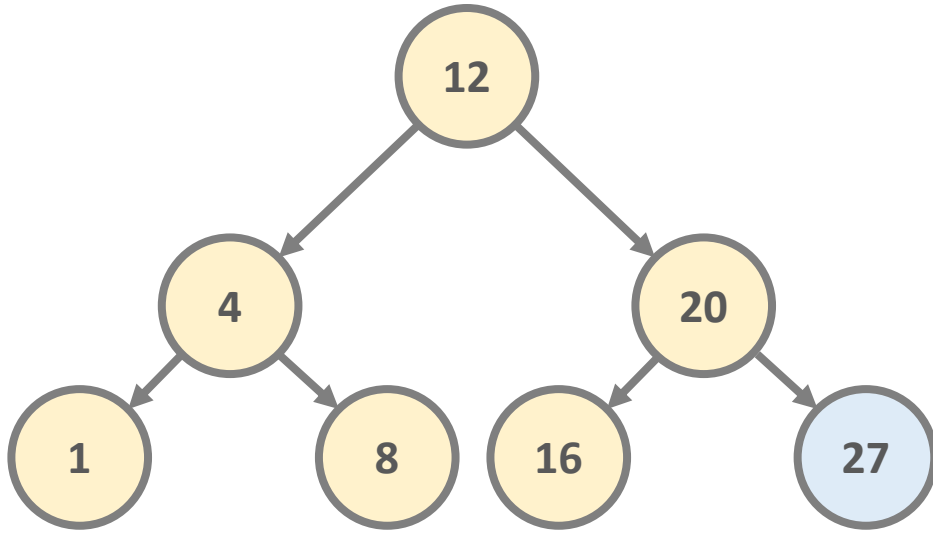
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

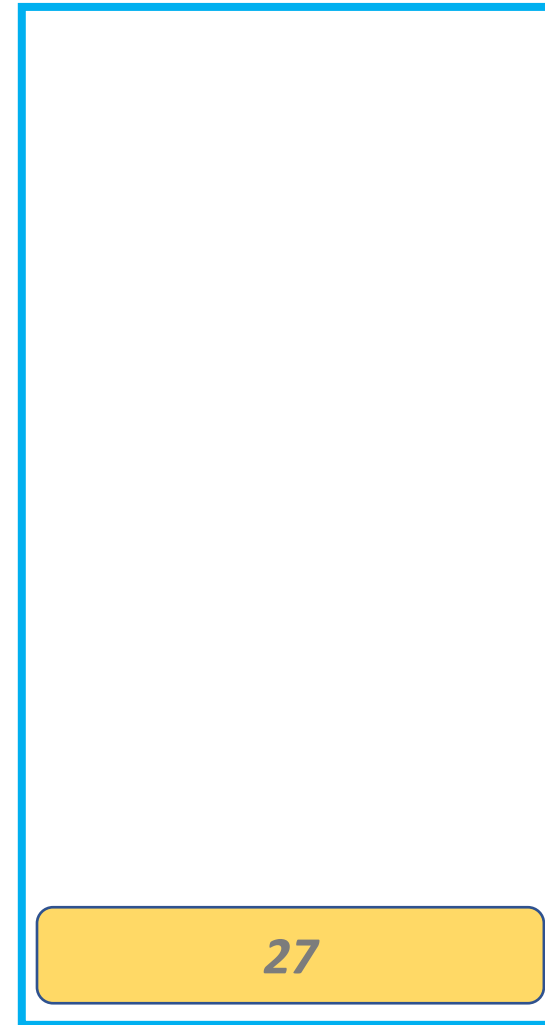
Binary Search Trees



max(node):

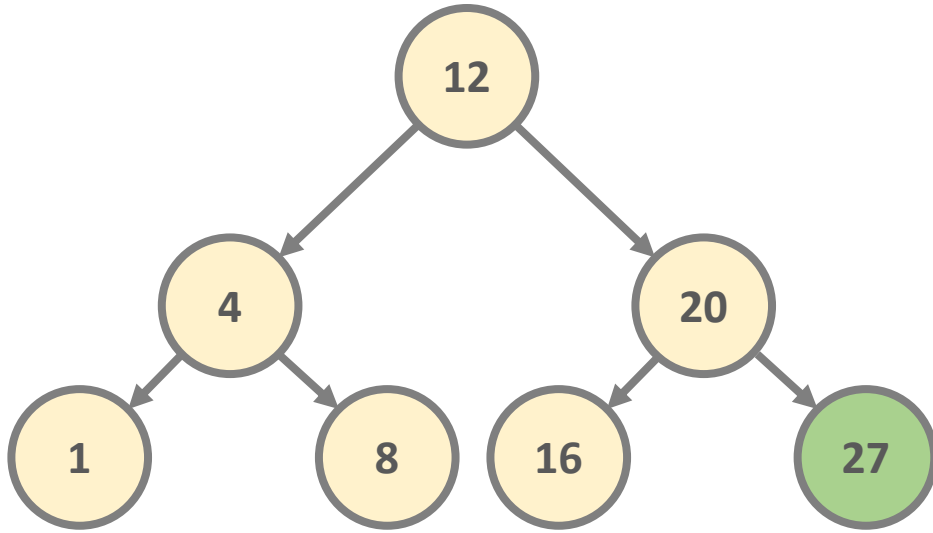
*if node right child is not NULL:
return max(node right child)*

return node value



STACK

Binary Search Trees



max(node):

*if node right child is not NULL:
return max(node right child)*

return node value

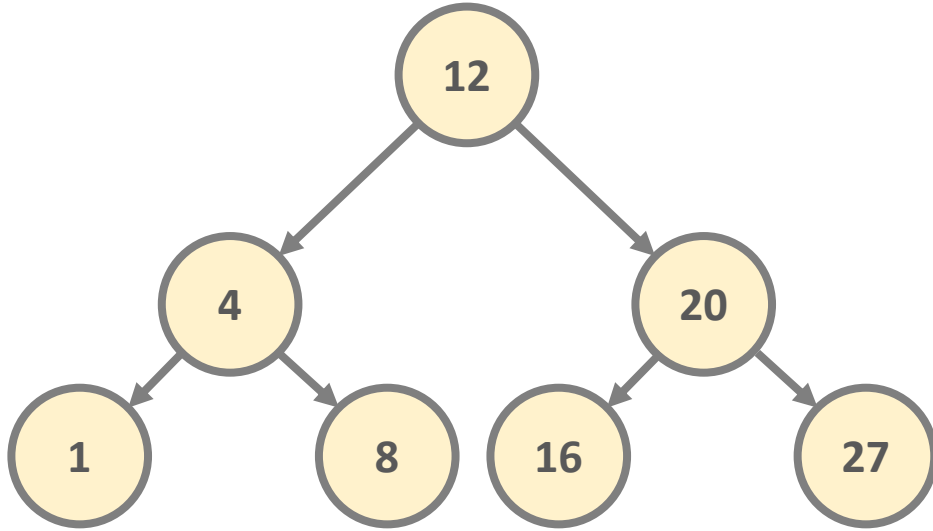


STACK

Stack Memory Visualization

(Algorithmic Problems)

Binary Search Trees



traverse(node):

*if node left child is not NULL:
traverse(node left child)*

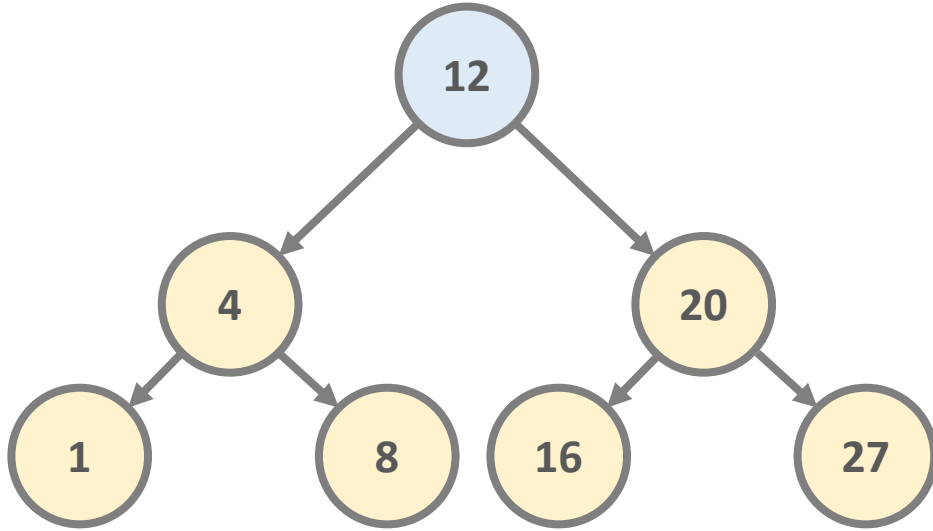
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

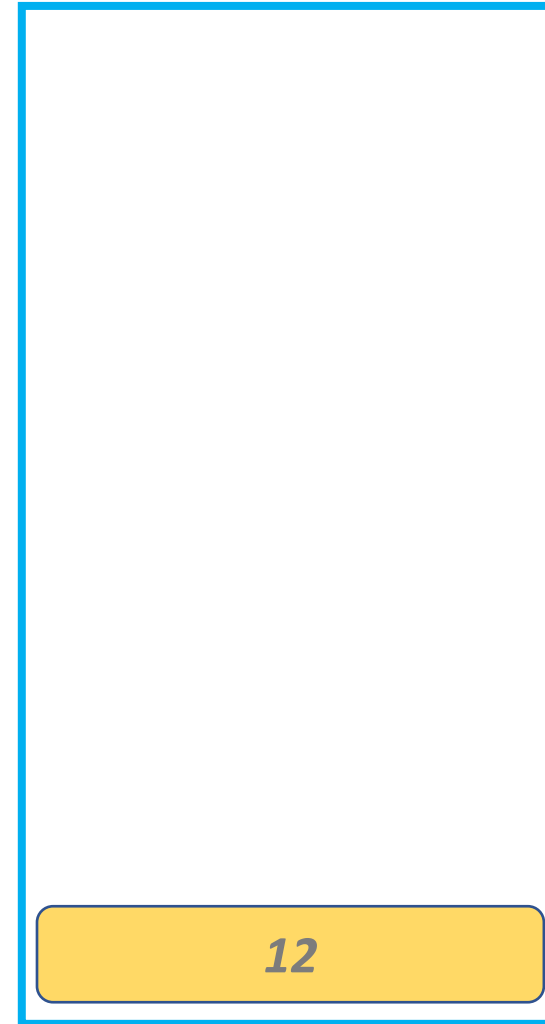


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

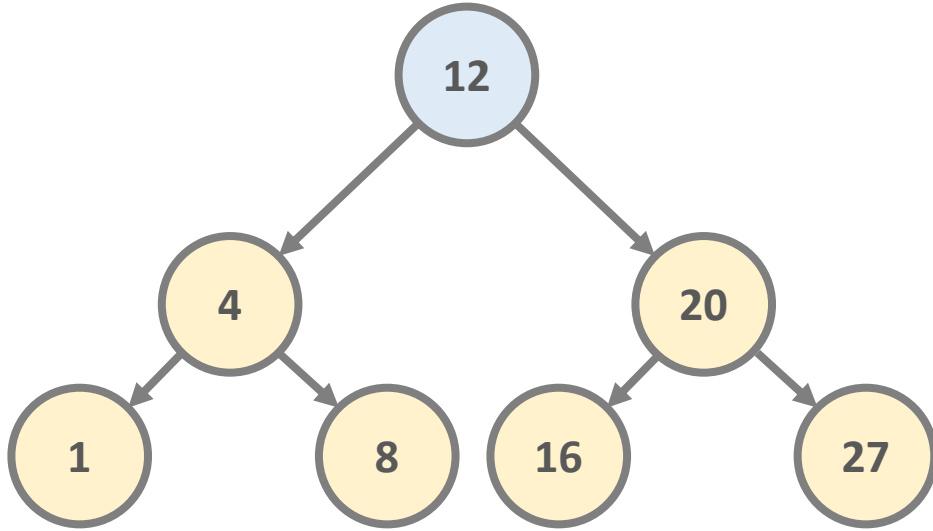
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:

traverse(node left child)

print node.data

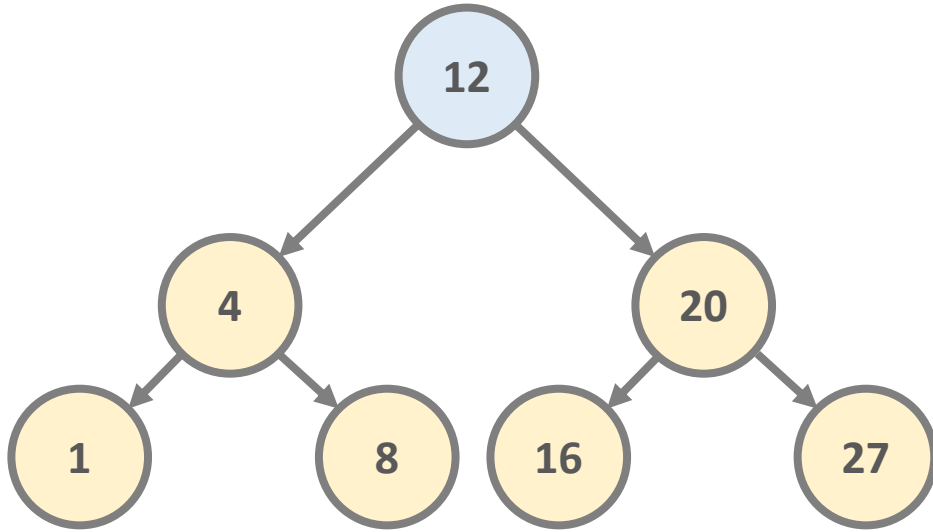
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

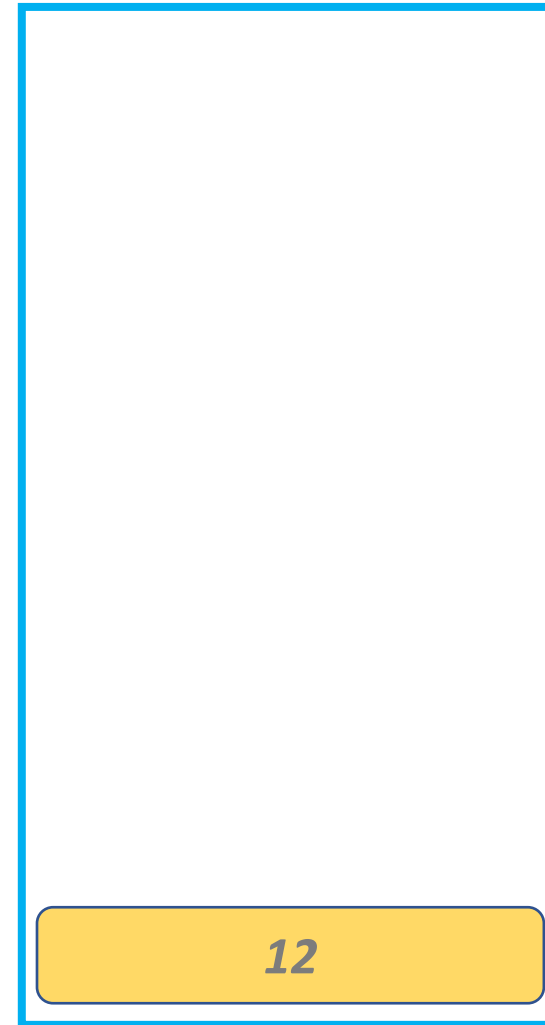
if node left child is not NULL:

traverse(node left child)

print node.data

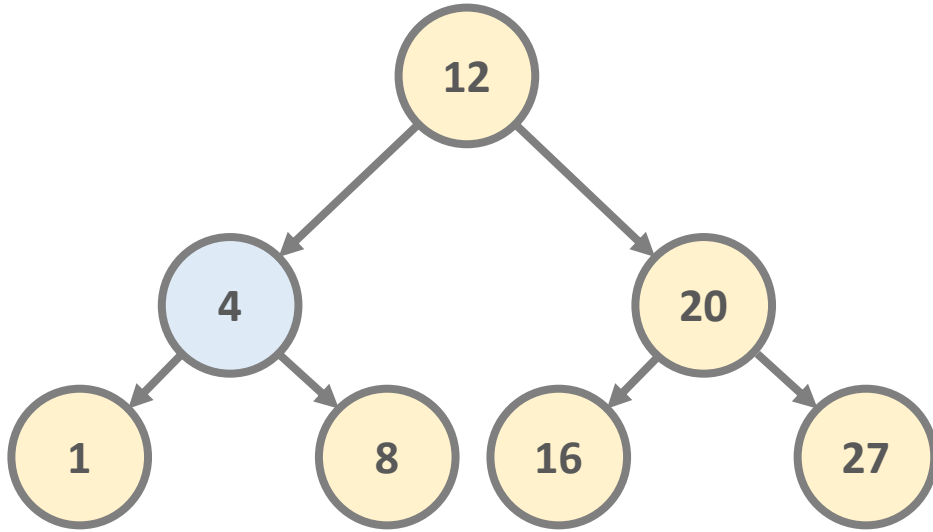
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

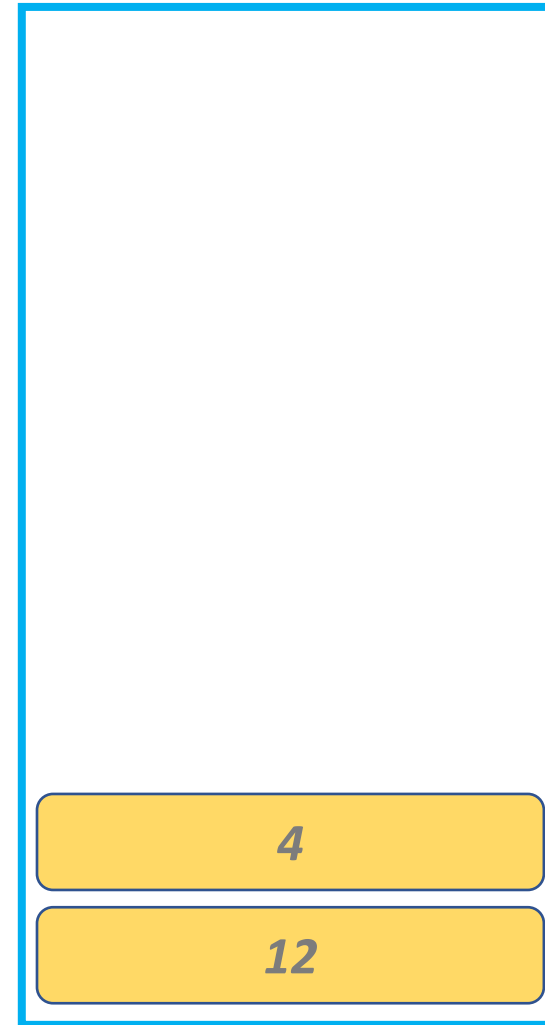
if node left child is not NULL:

traverse(node left child)

print node.data

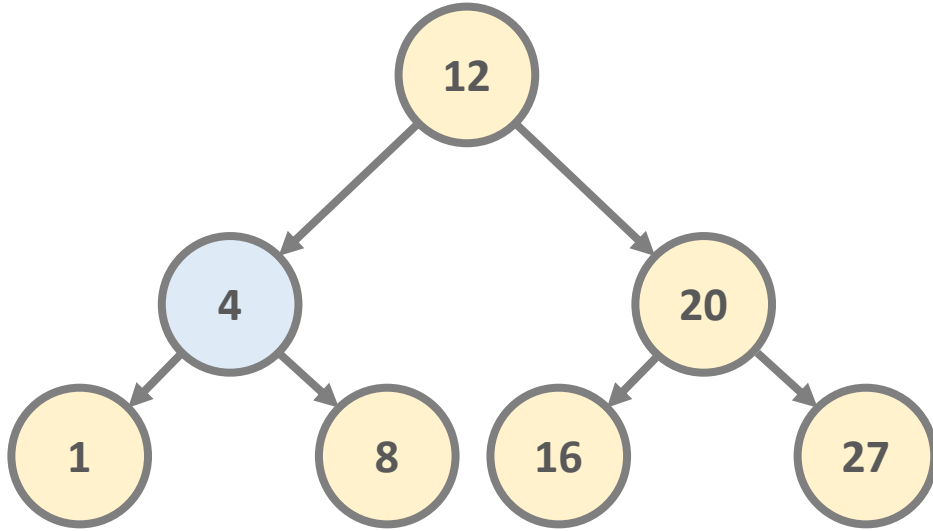
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

*if node left child is not NULL:
traverse(node left child)*

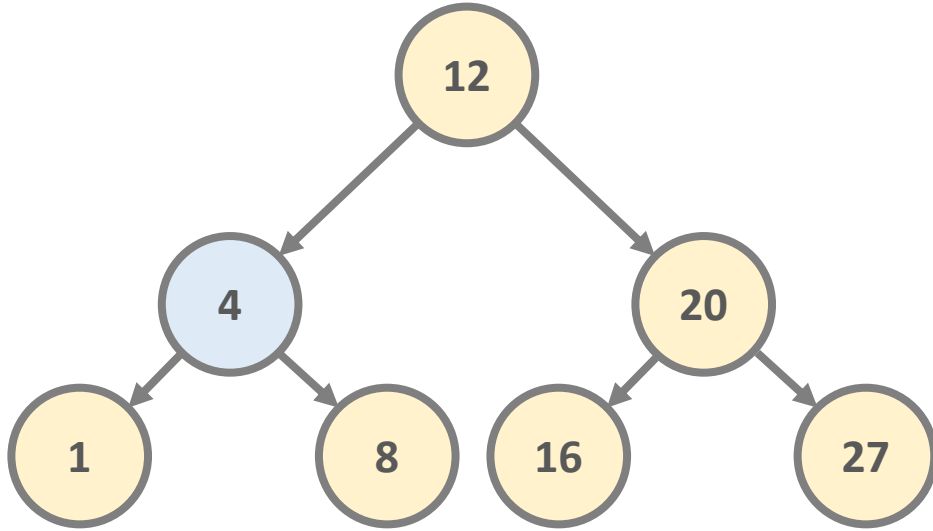
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

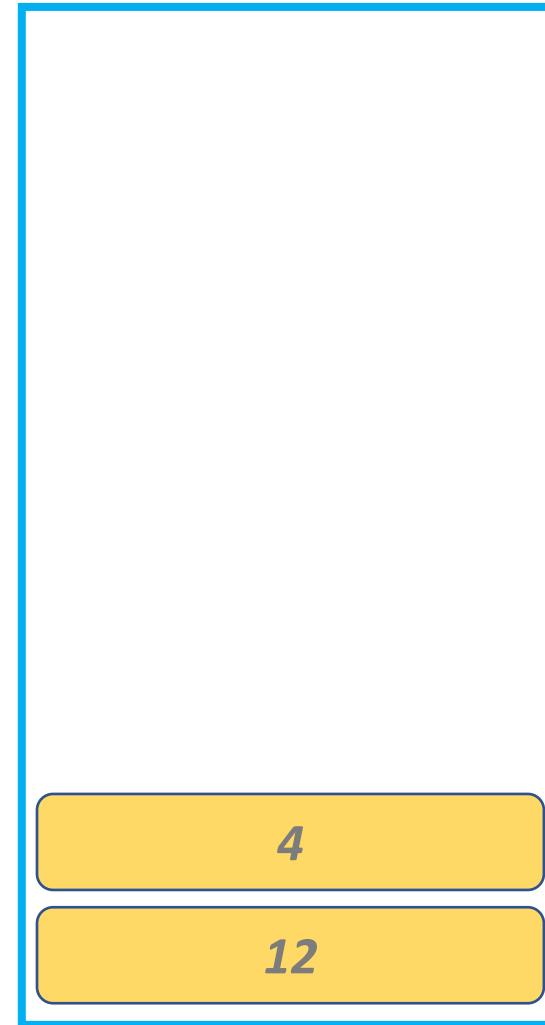
if node left child is not NULL:

traverse(node left child)

print node.data

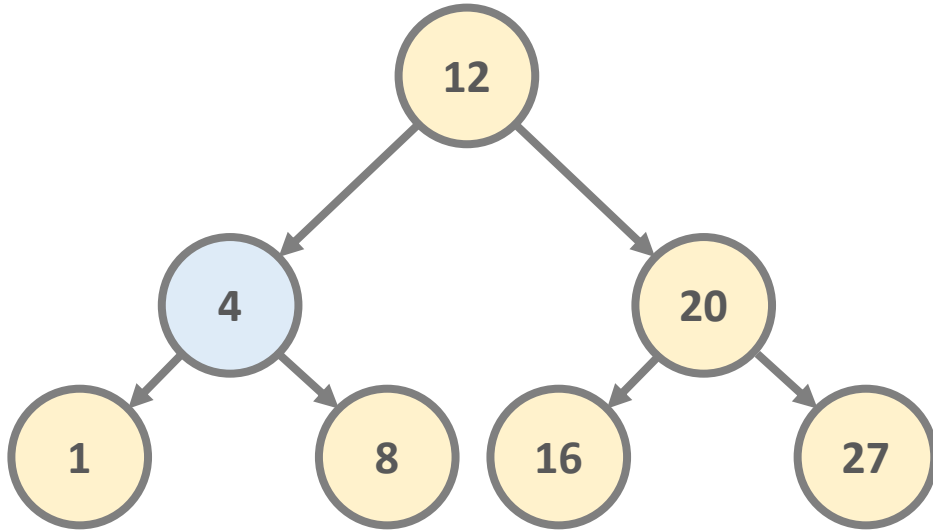
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

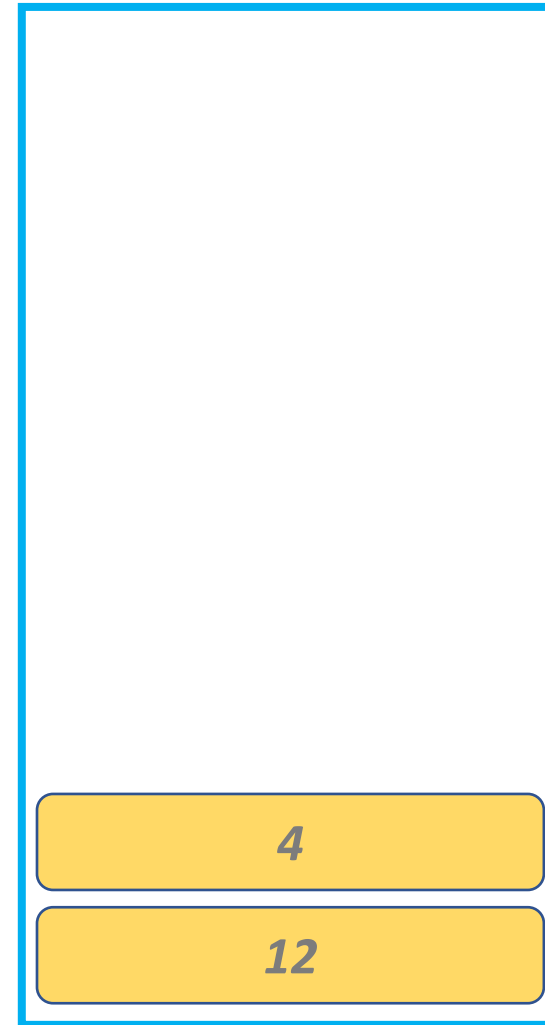
if node left child is not NULL:

traverse(node left child)

print node.data

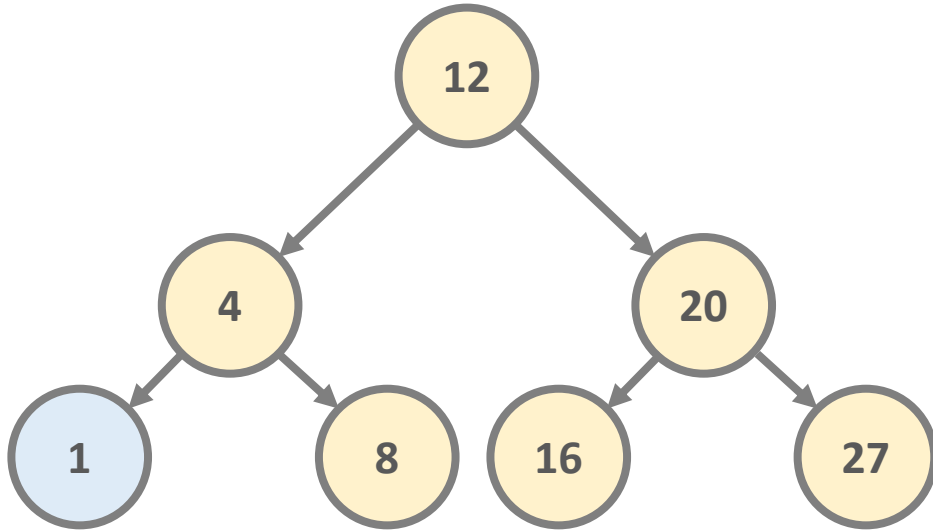
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

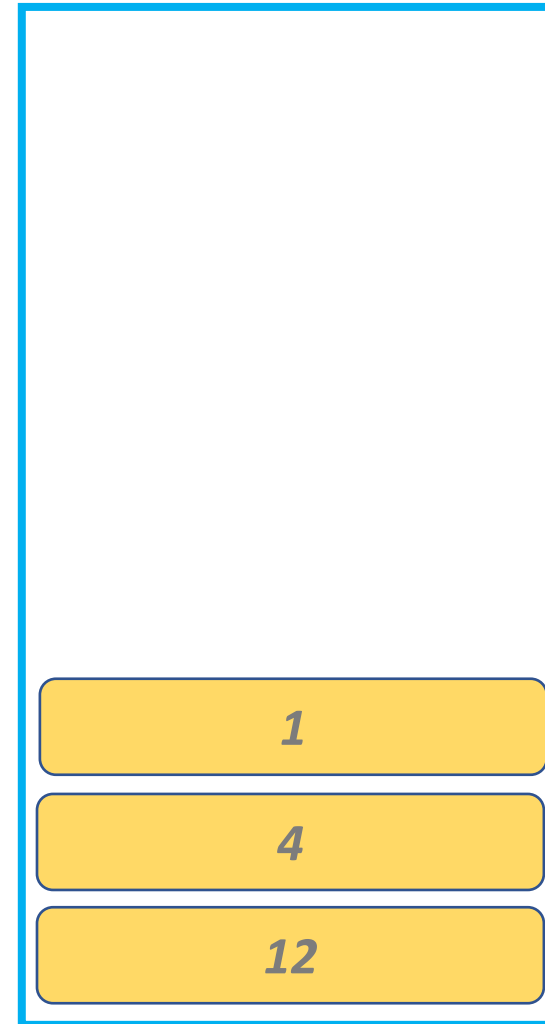
if node left child is not NULL:

traverse(node left child)

print node.data

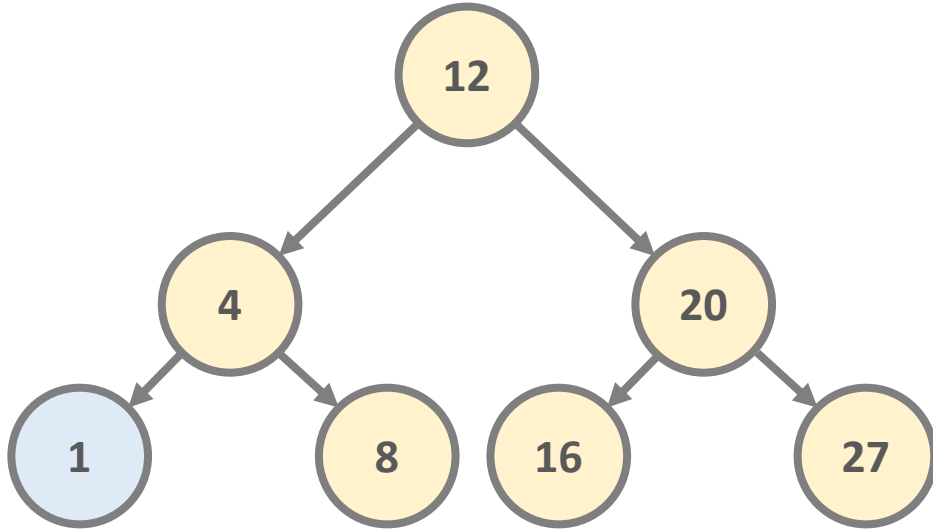
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees

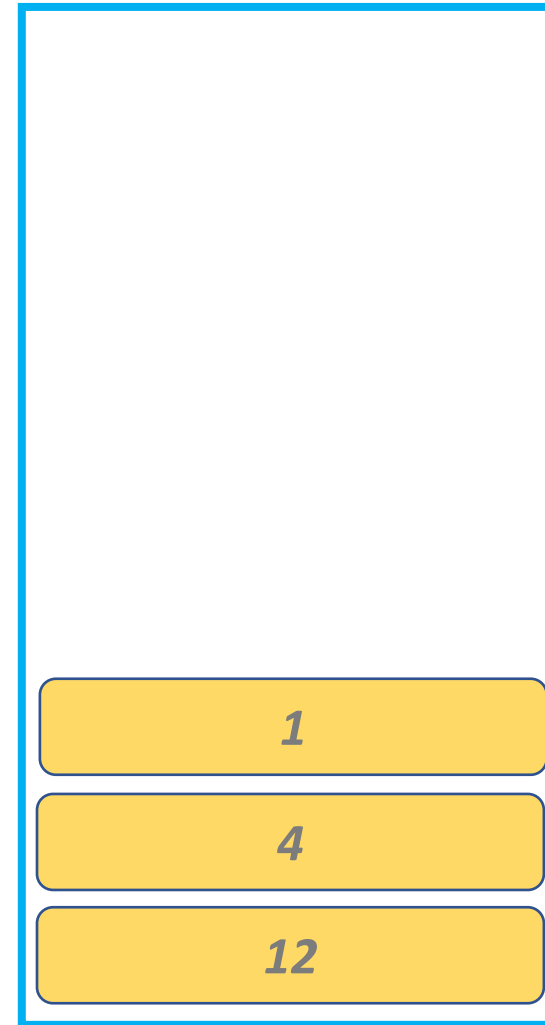


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

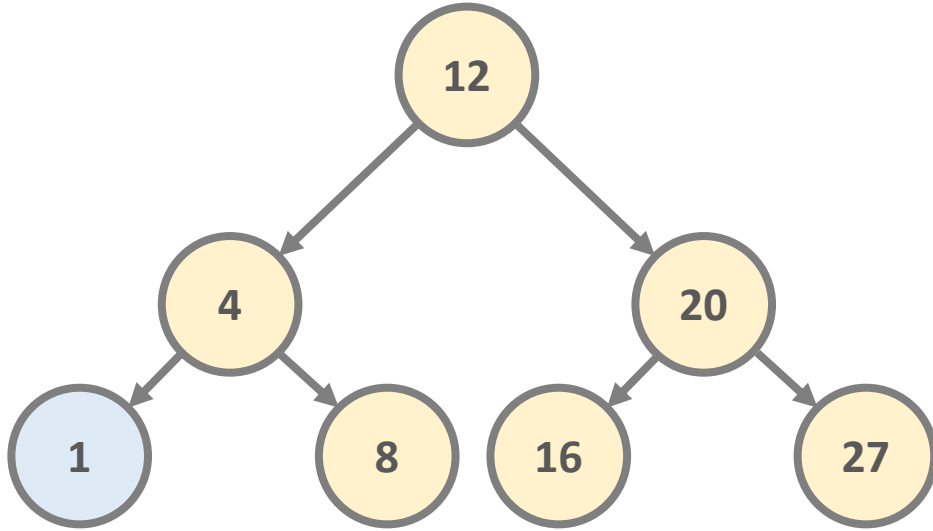
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

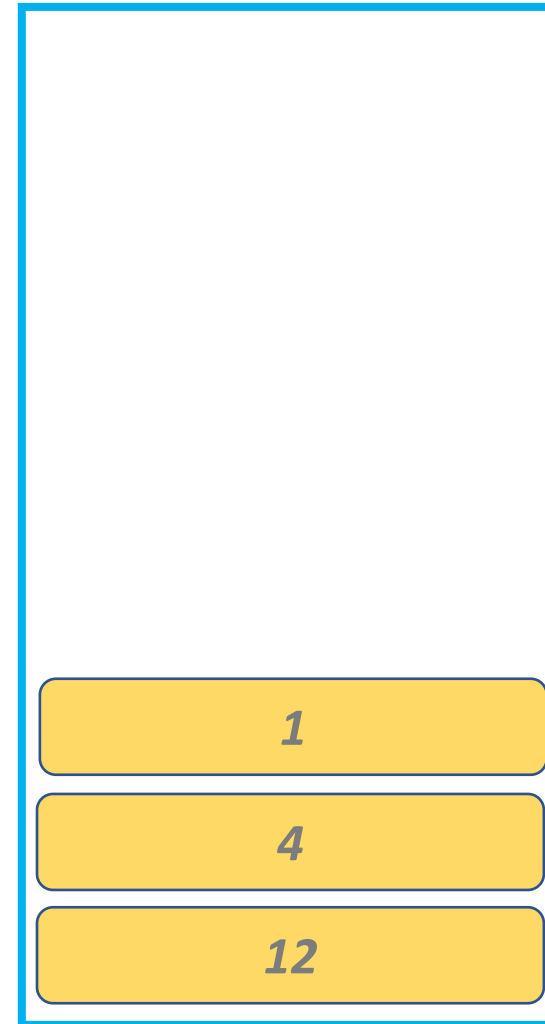
if node left child is not NULL:

traverse(node left child)

print node.data

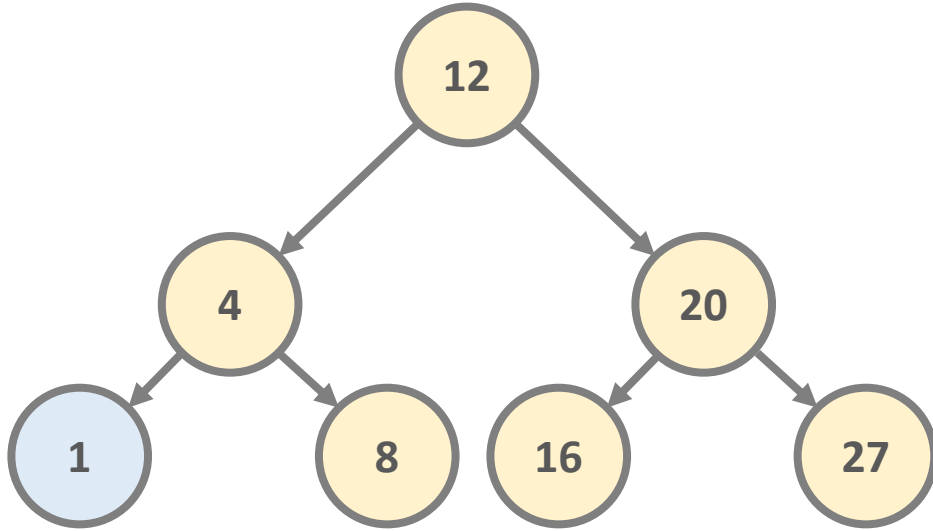
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees

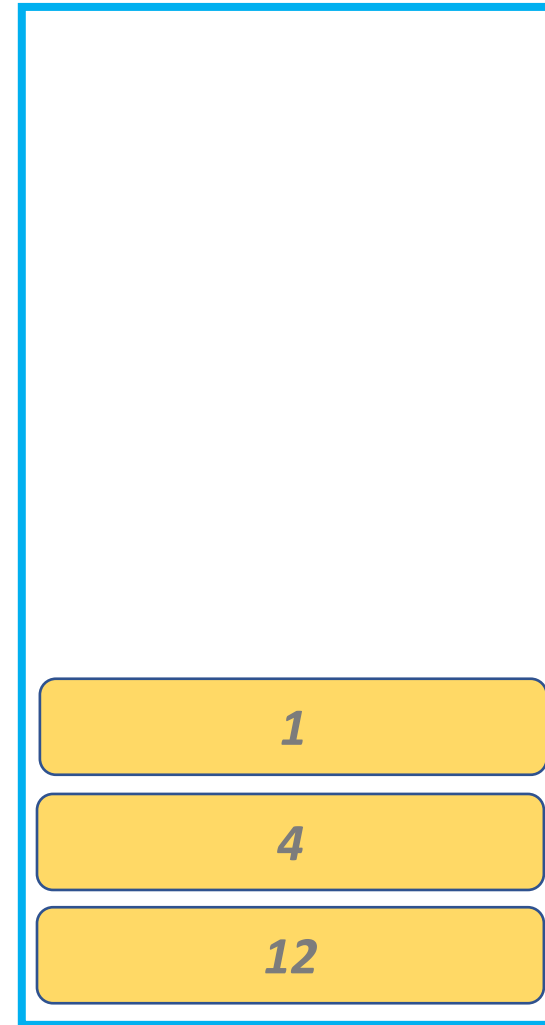


traverse(node):

if node left child is not NULL:
traverse(node left child)

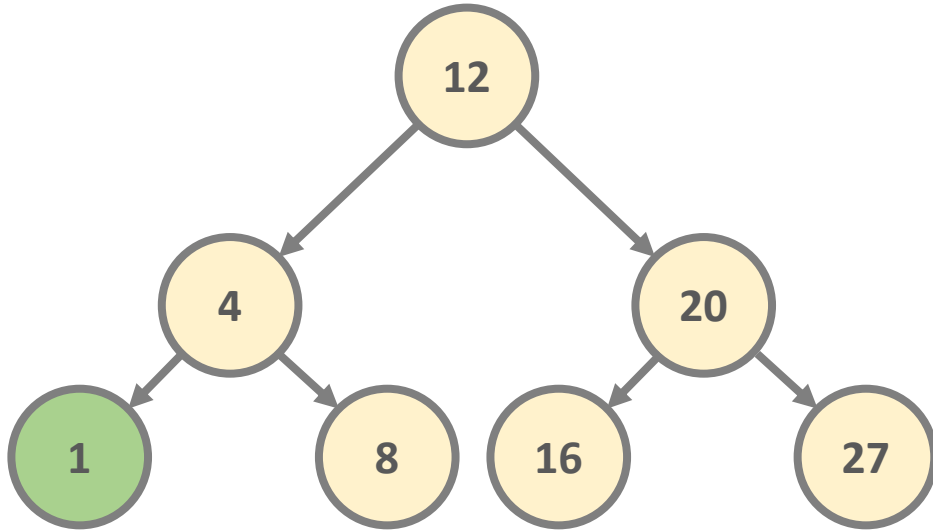
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

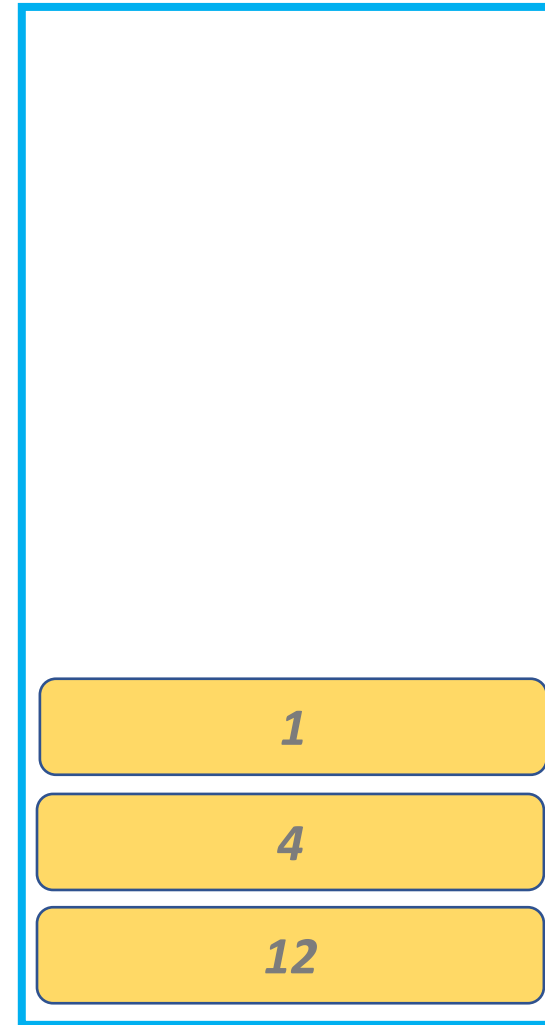


traverse(node):

if node left child is not NULL:
traverse(node left child)

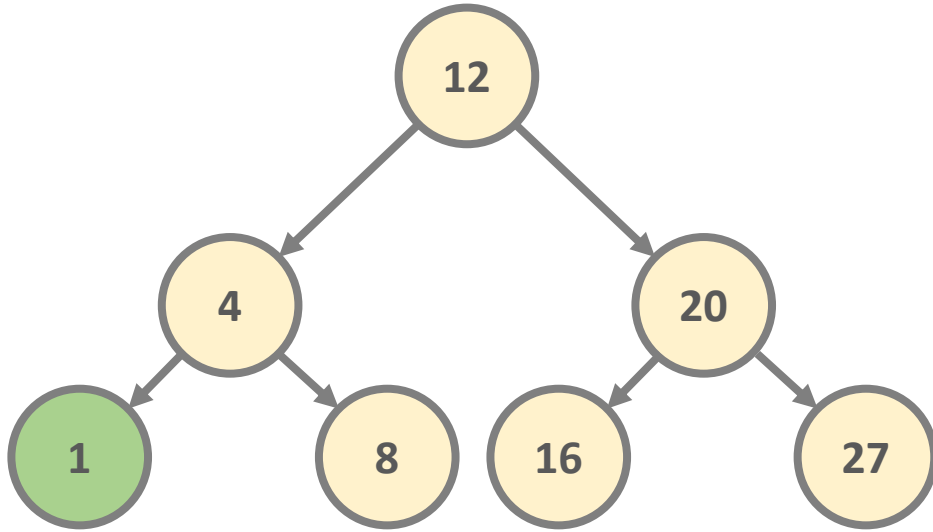
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

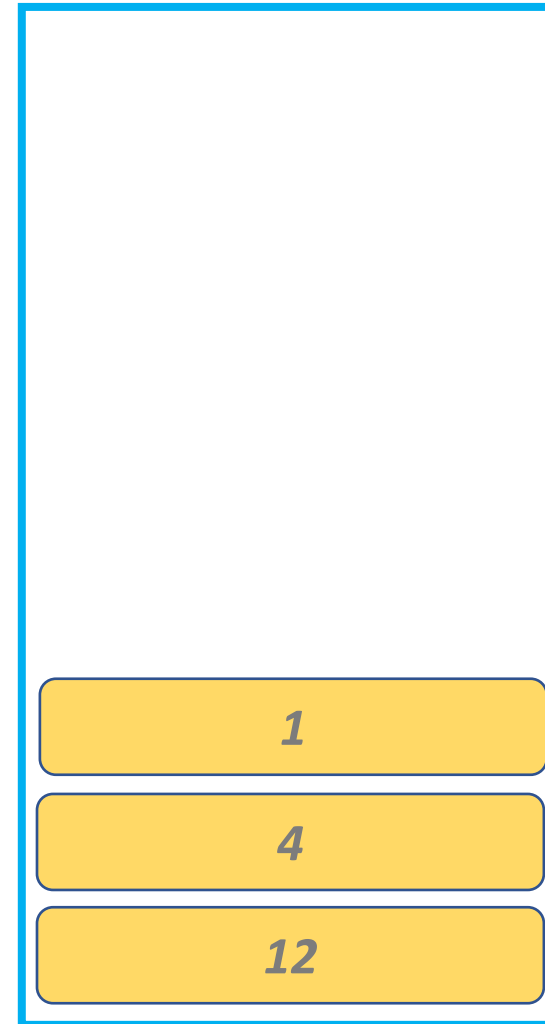


traverse(node):

if node left child is not NULL:
traverse(node left child)

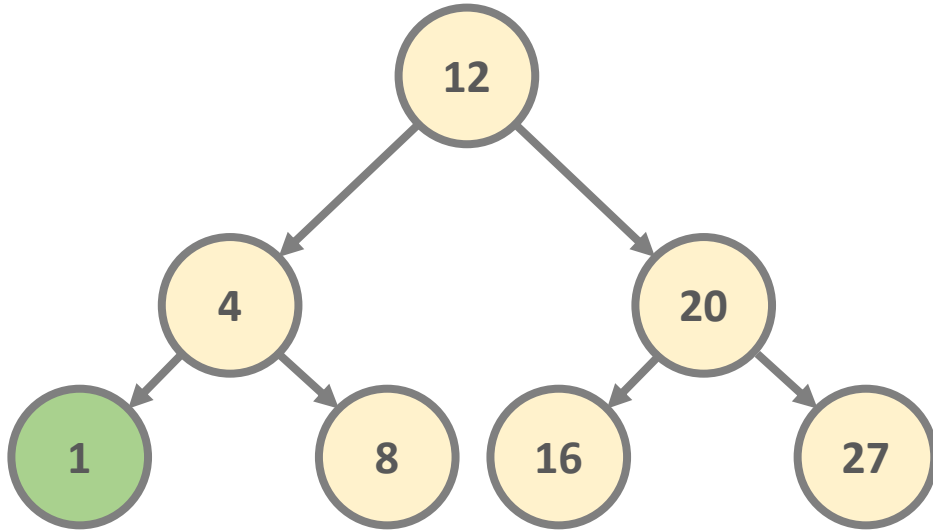
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

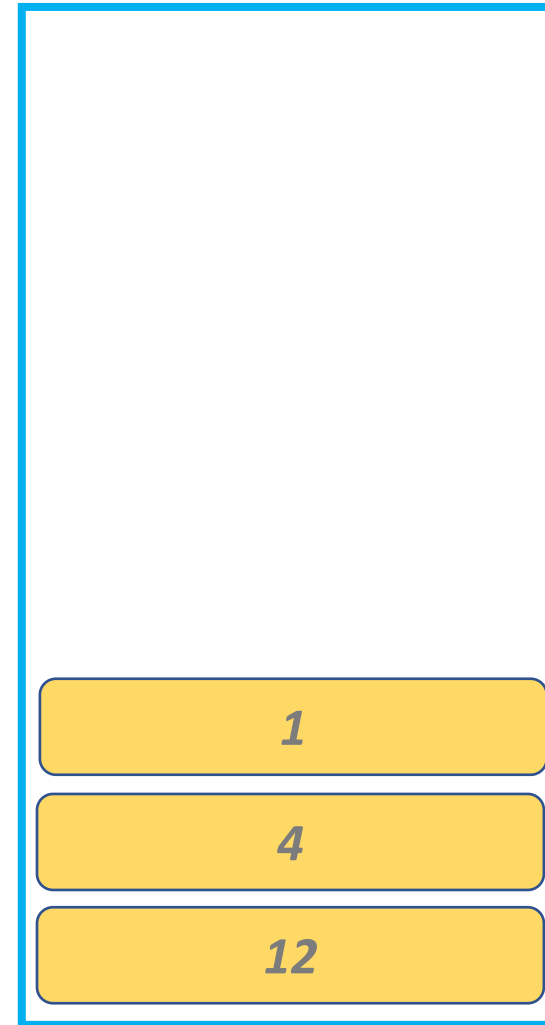


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

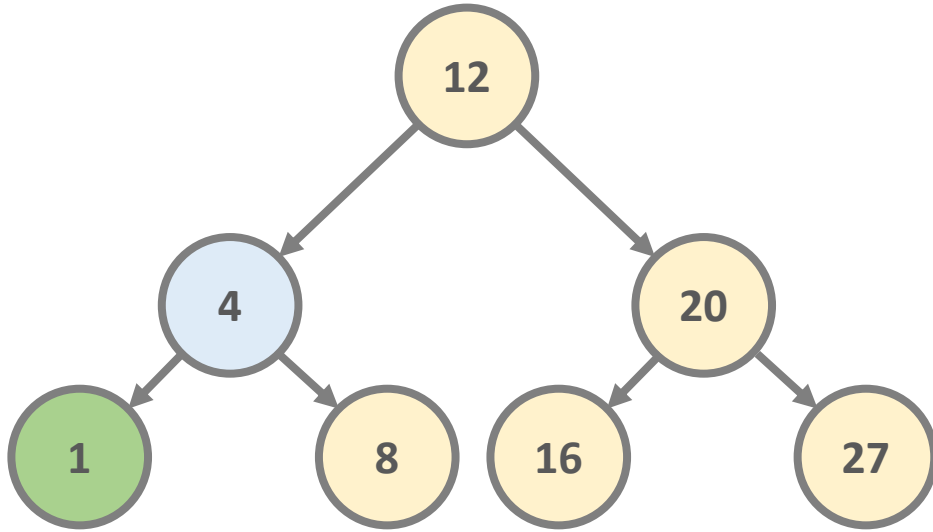
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

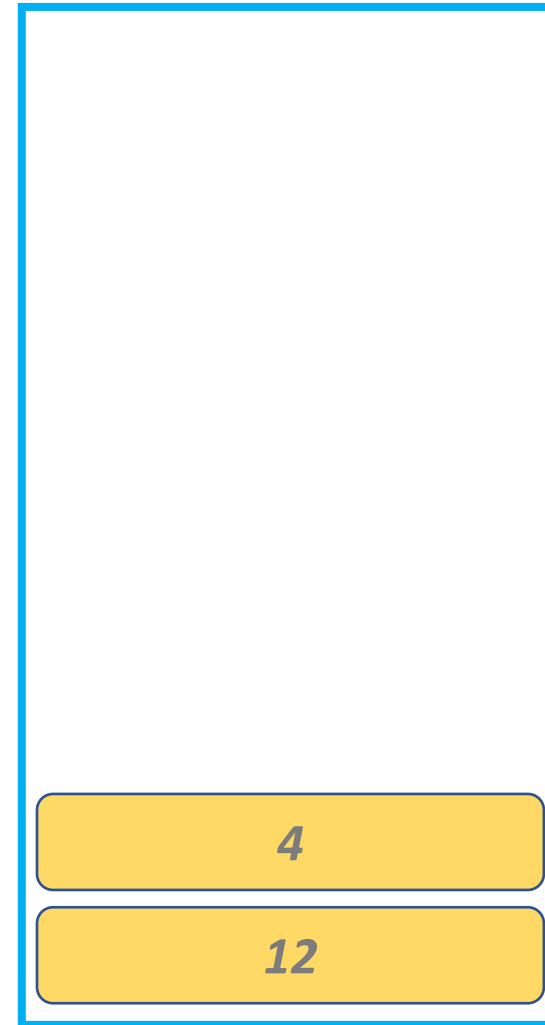


traverse(node):

if node left child is not NULL:
traverse(node left child)

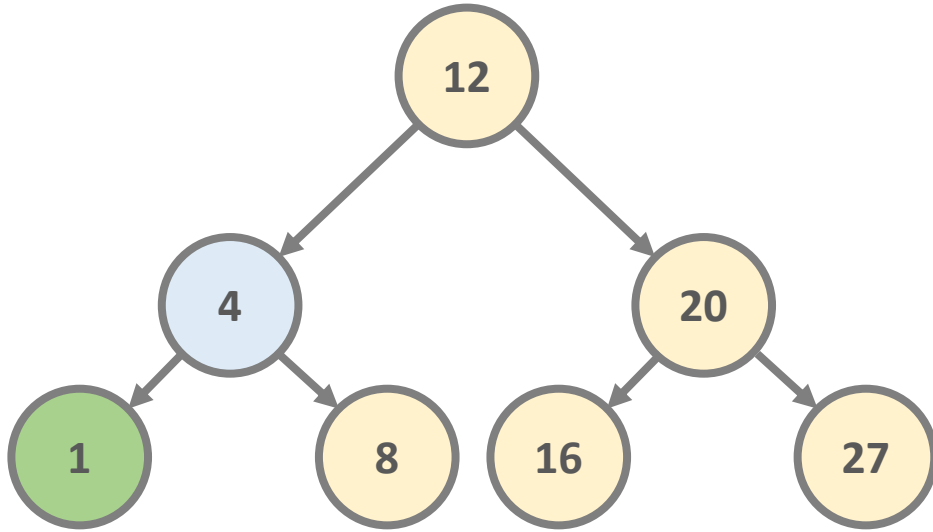
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

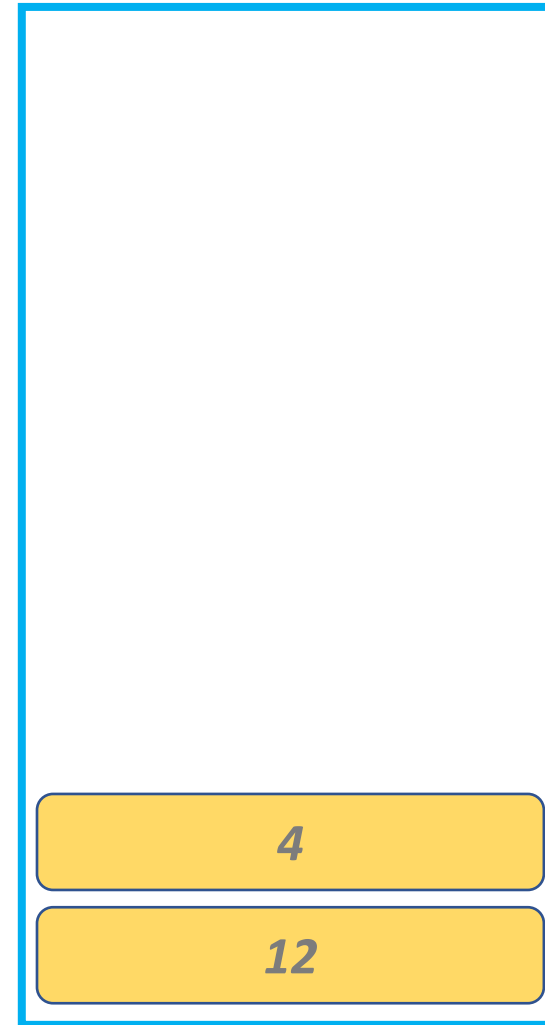


traverse(node):

if node left child is not NULL:
traverse(node left child)

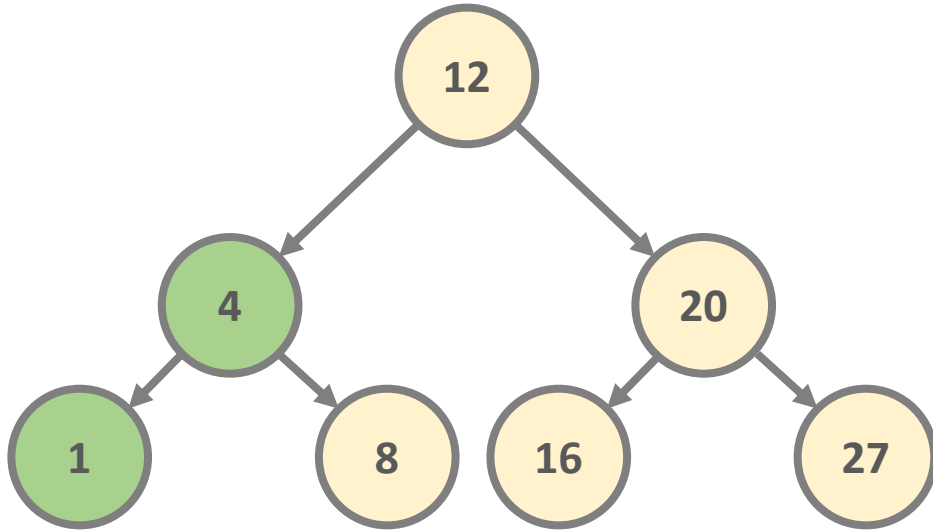
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

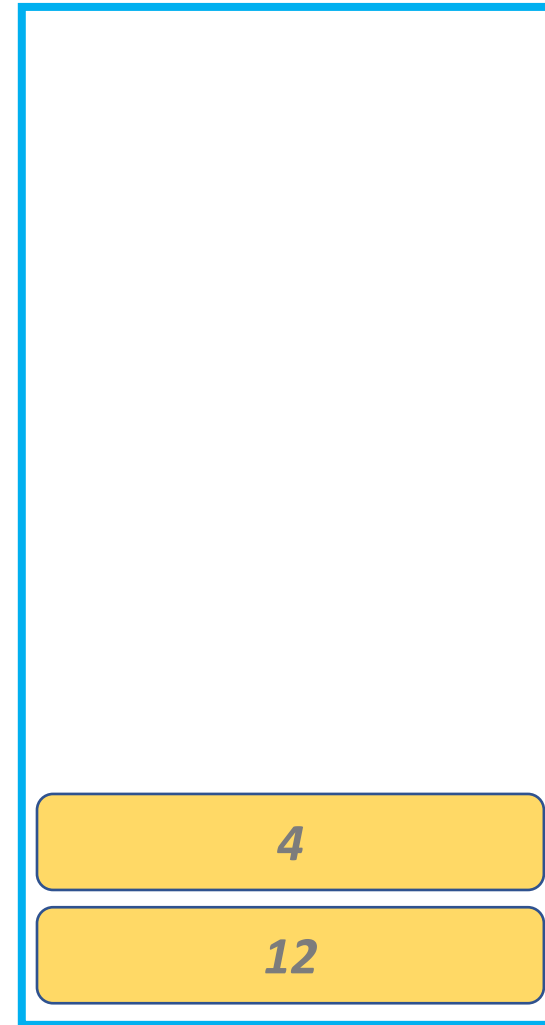


traverse(node):

if node left child is not NULL:
traverse(node left child)

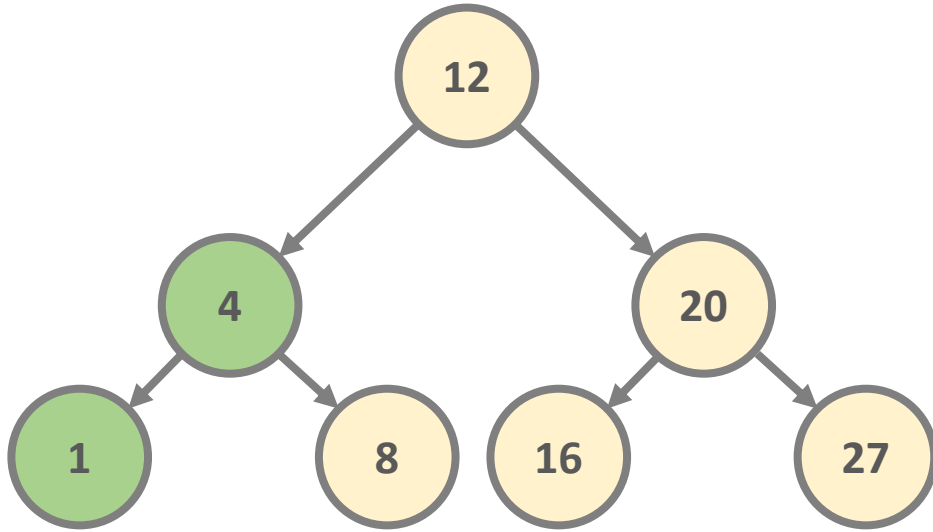
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:
traverse(node left child)

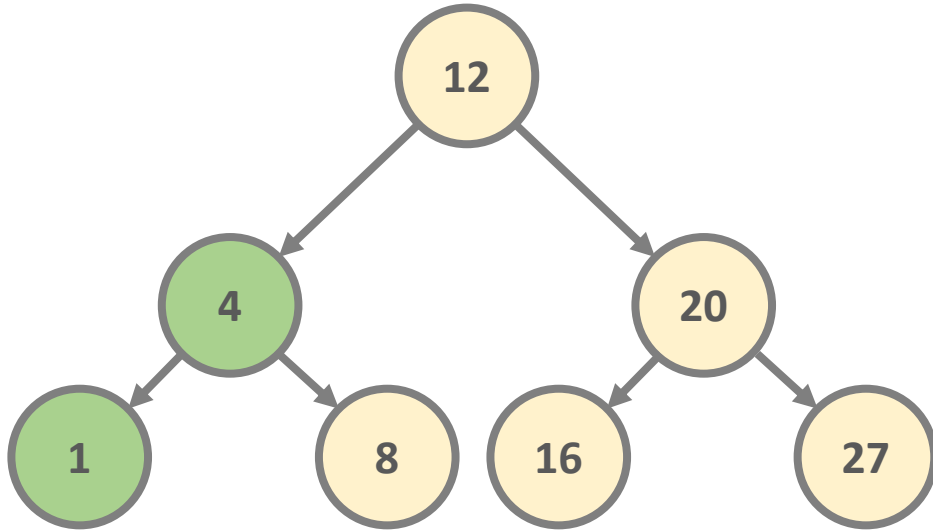
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

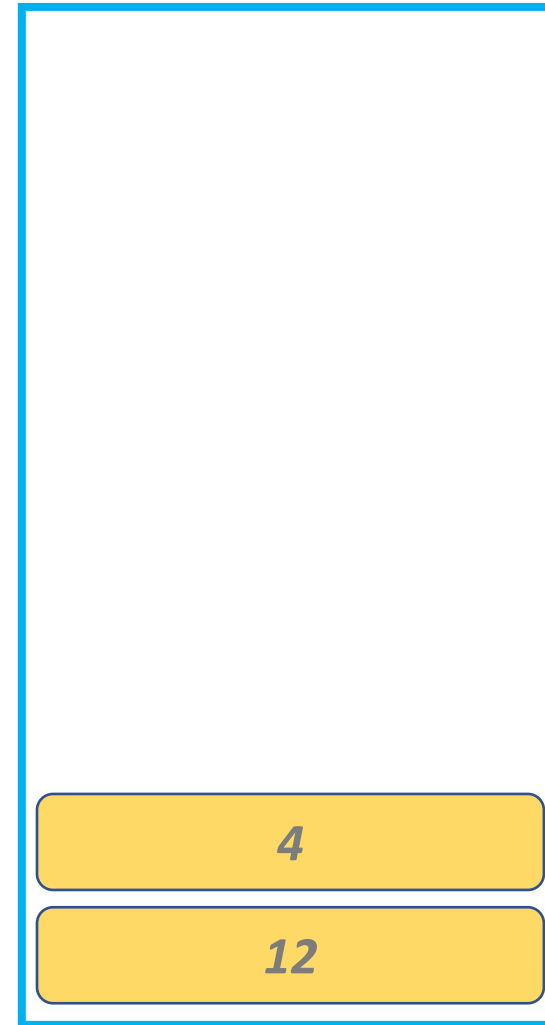


traverse(node):

if node left child is not NULL:
traverse(node left child)

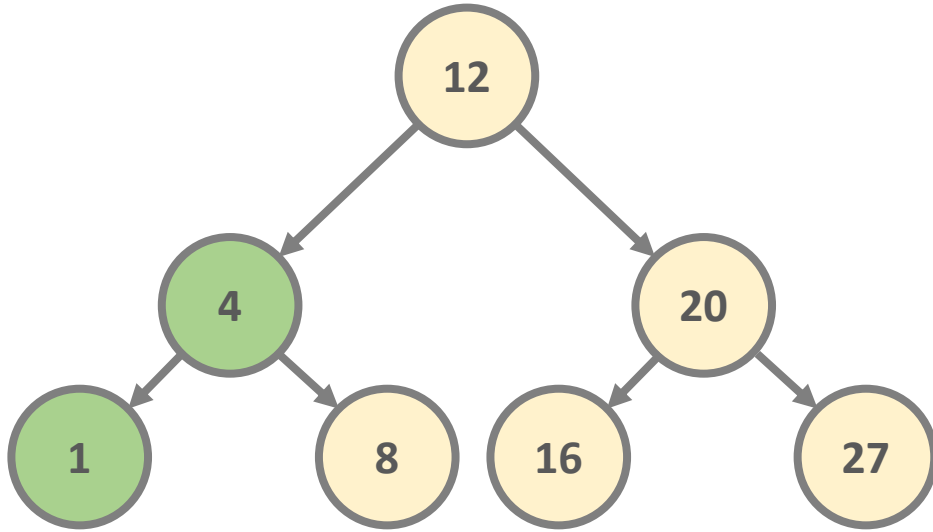
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

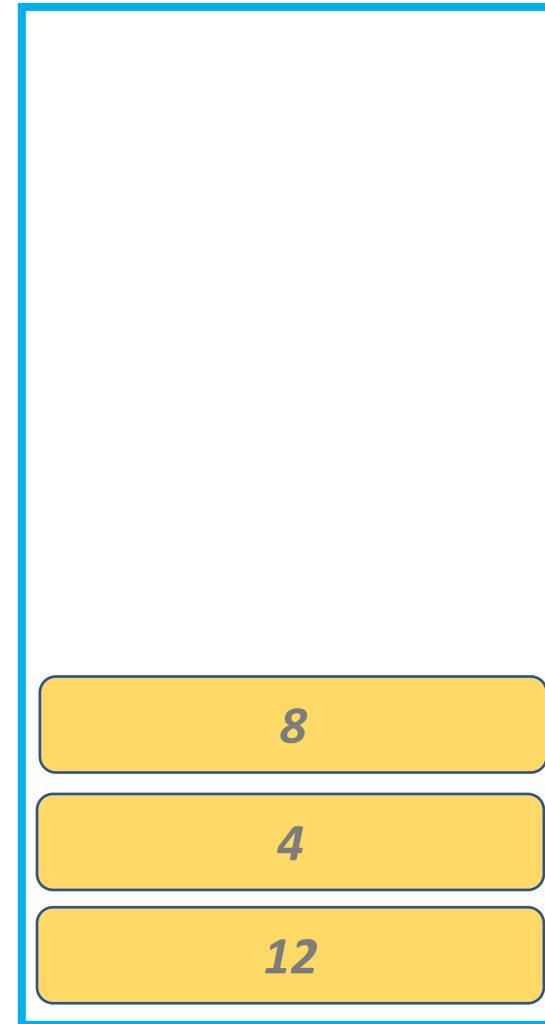


traverse(node):

if node left child is not NULL:
traverse(node left child)

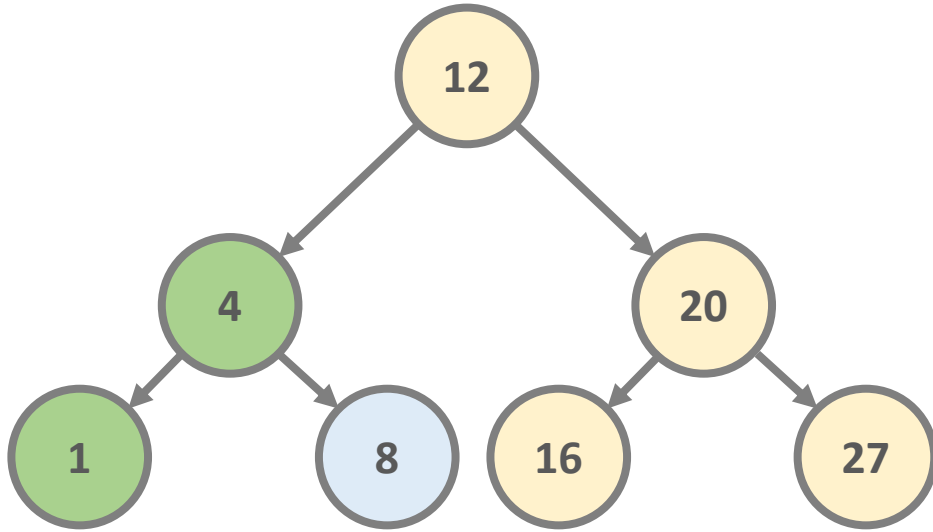
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

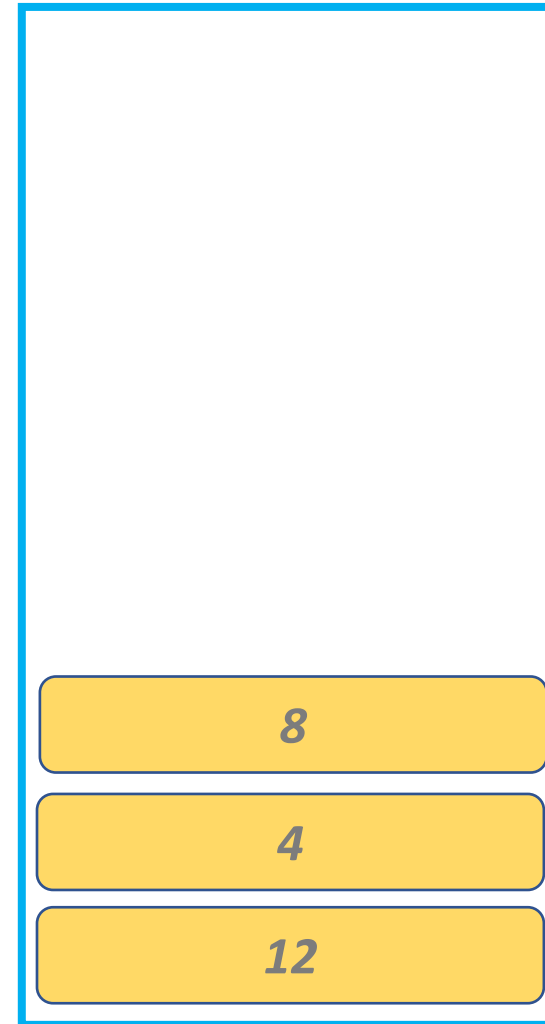


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

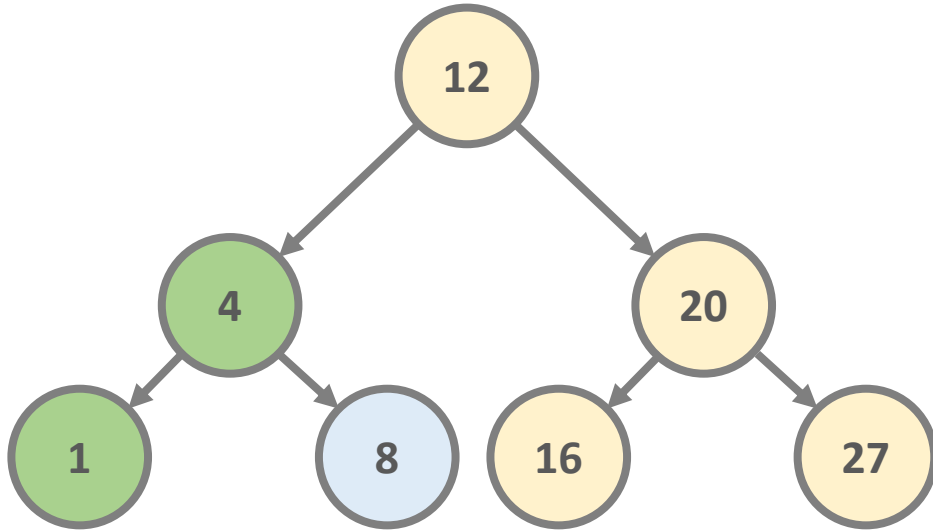
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

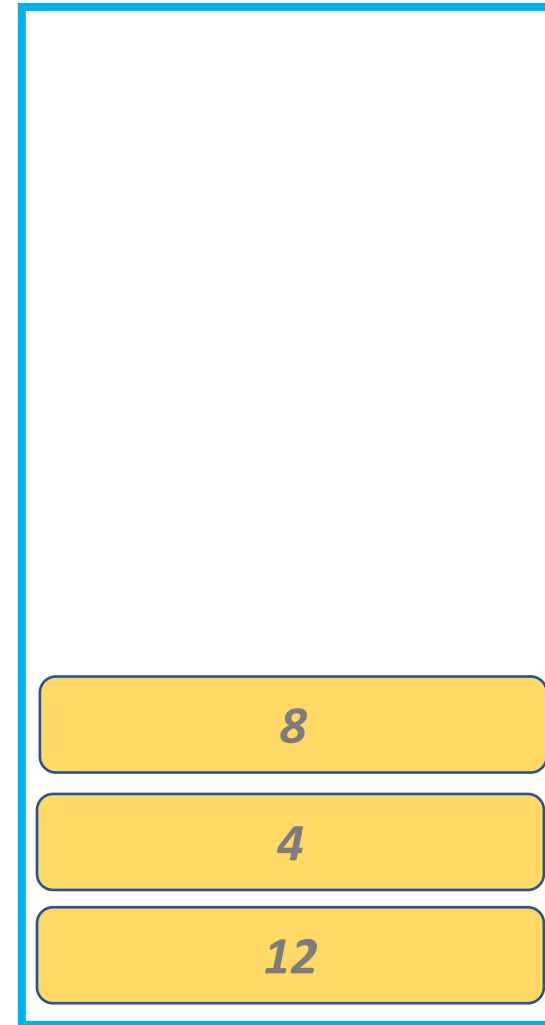
if node left child is not NULL:

traverse(node left child)

print node.data

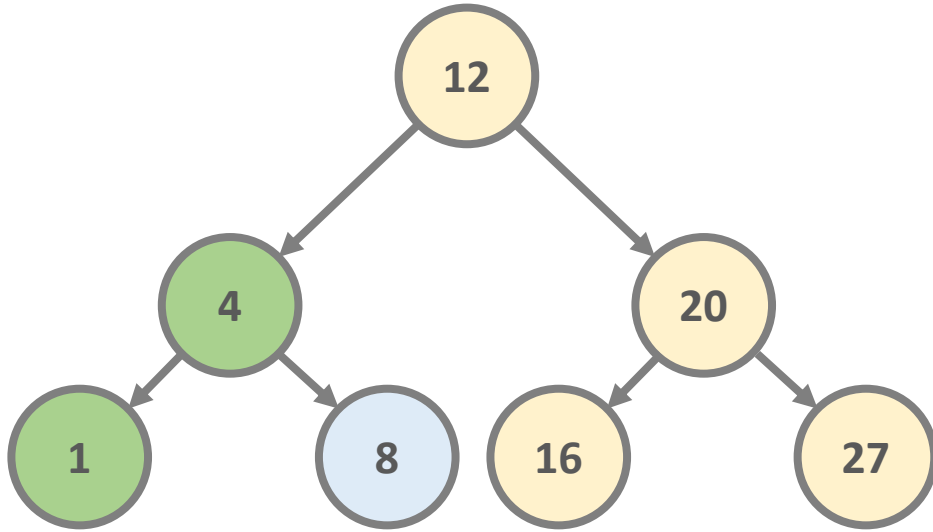
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees

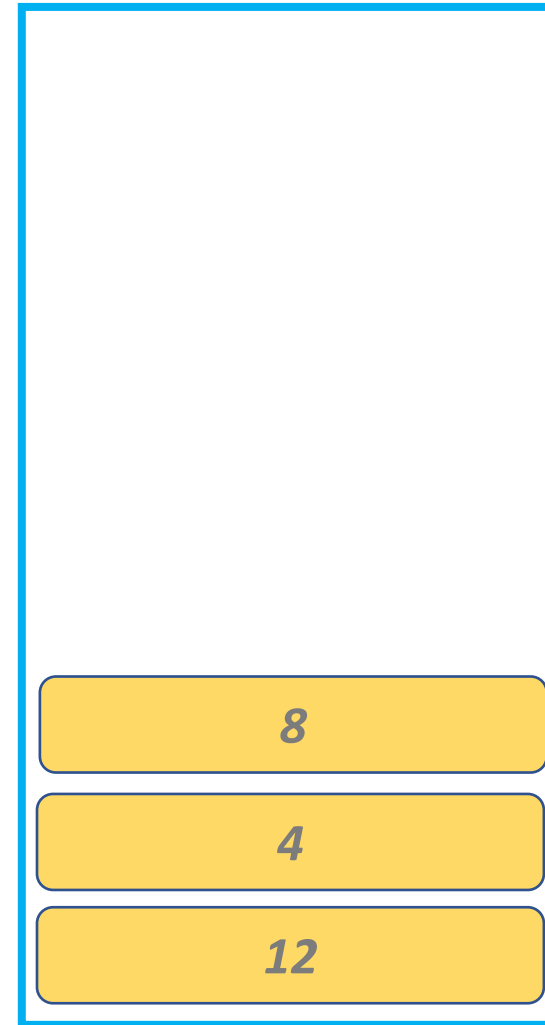


traverse(node):

if node left child is not NULL:
traverse(node left child)

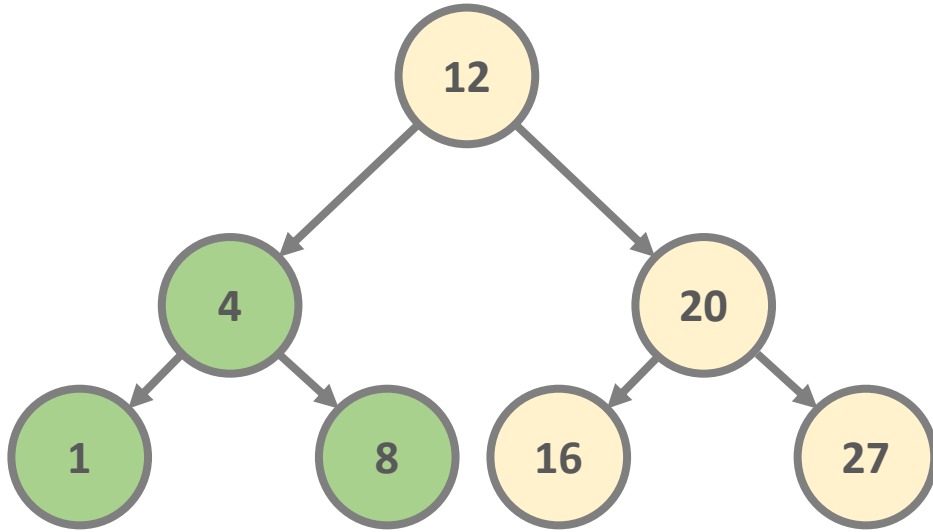
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

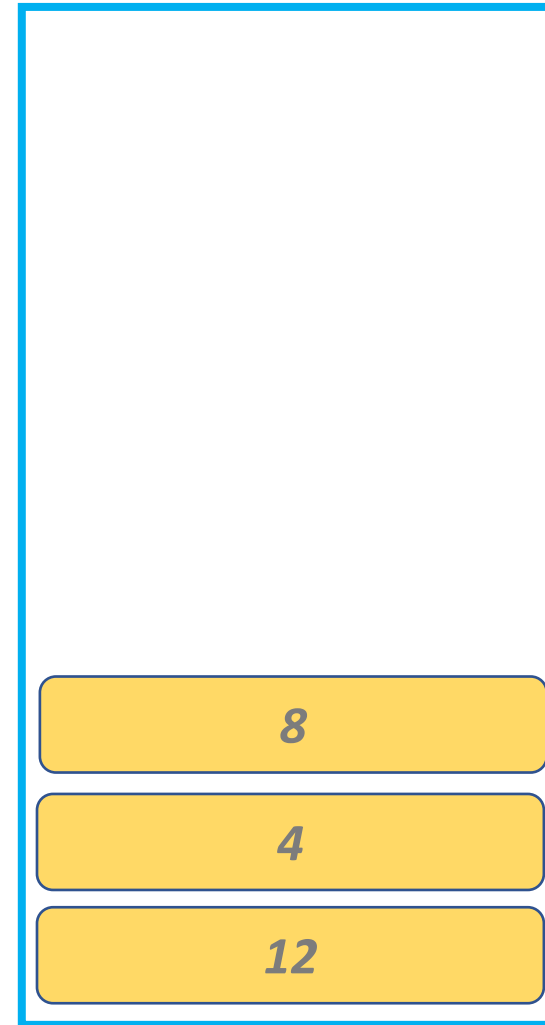


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

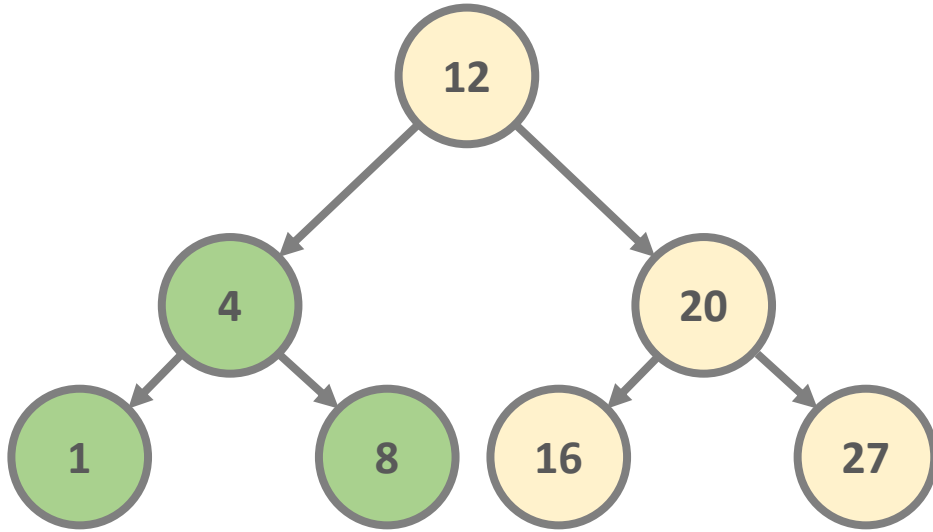
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

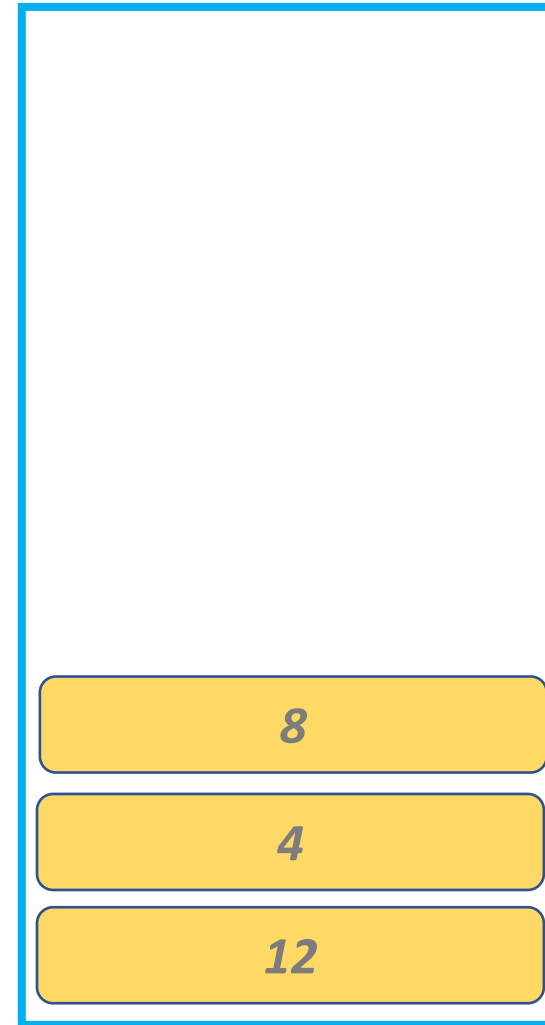


traverse(node):

if node left child is not NULL:
traverse(node left child)

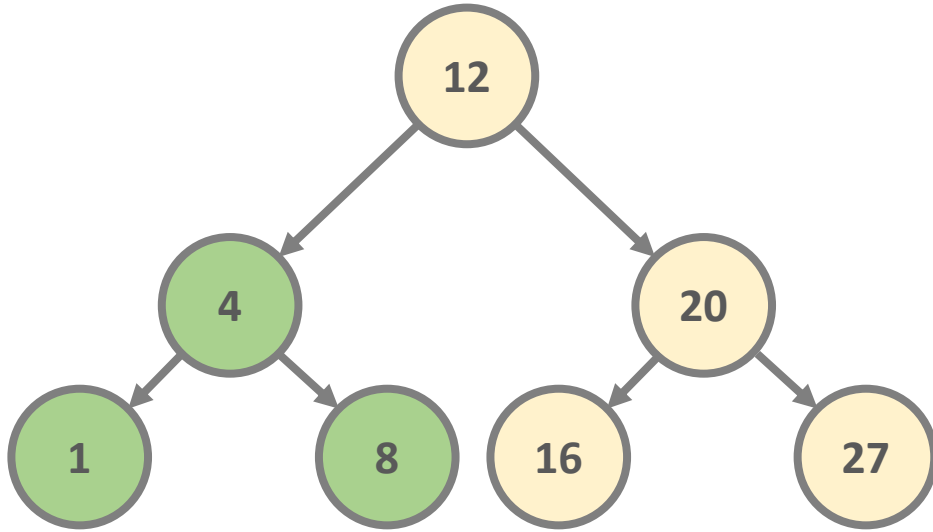
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

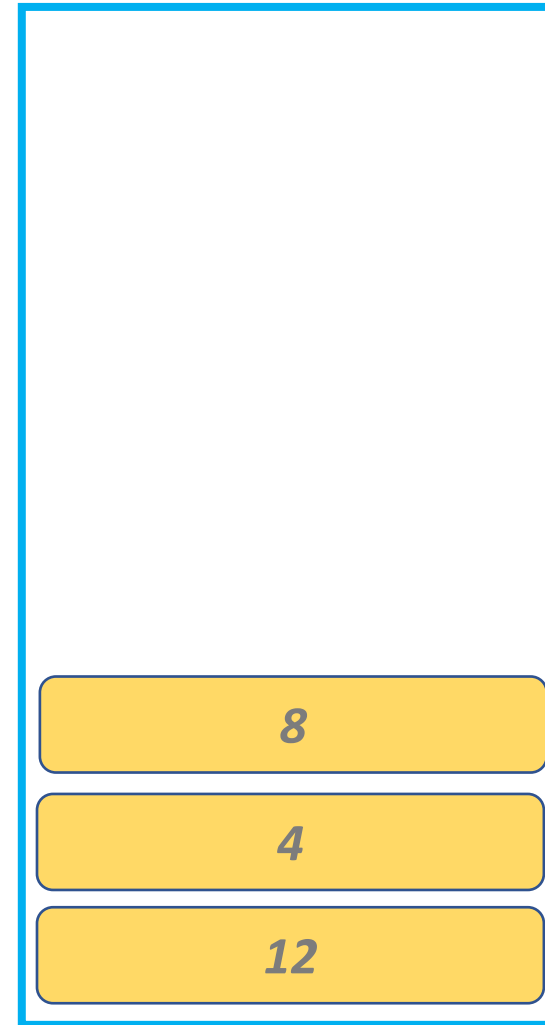


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

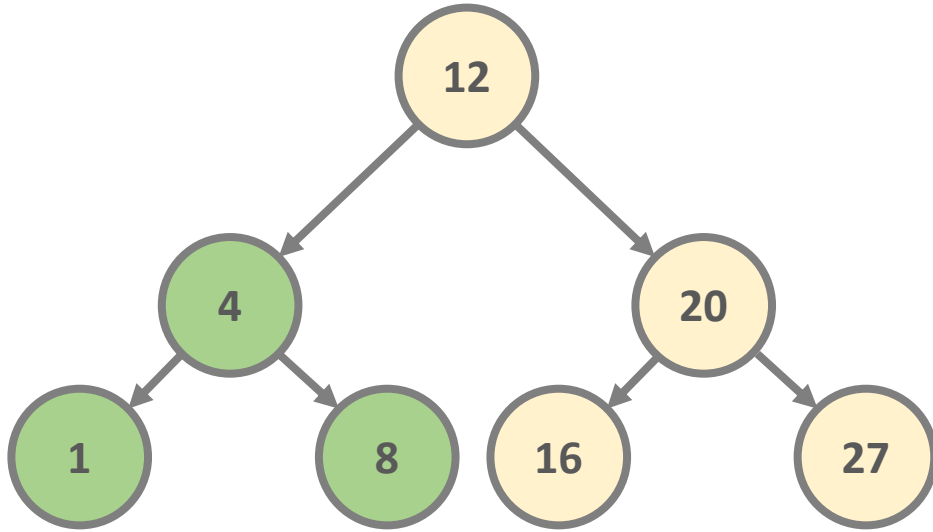
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

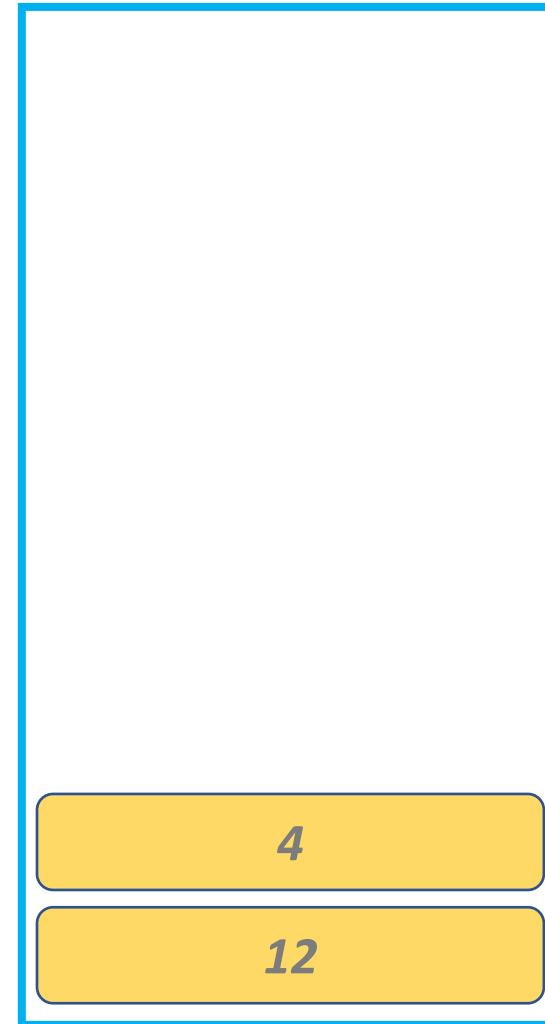


traverse(node):

if node left child is not NULL:
traverse(node left child)

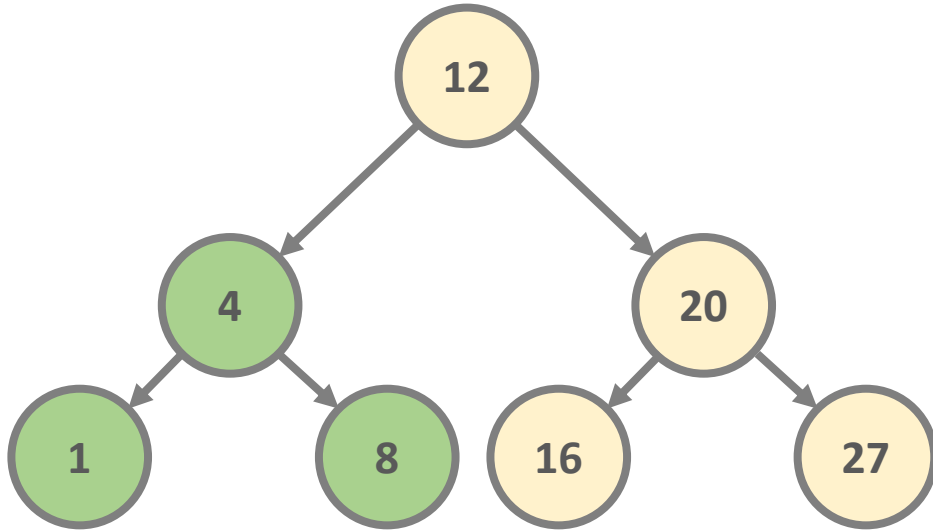
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

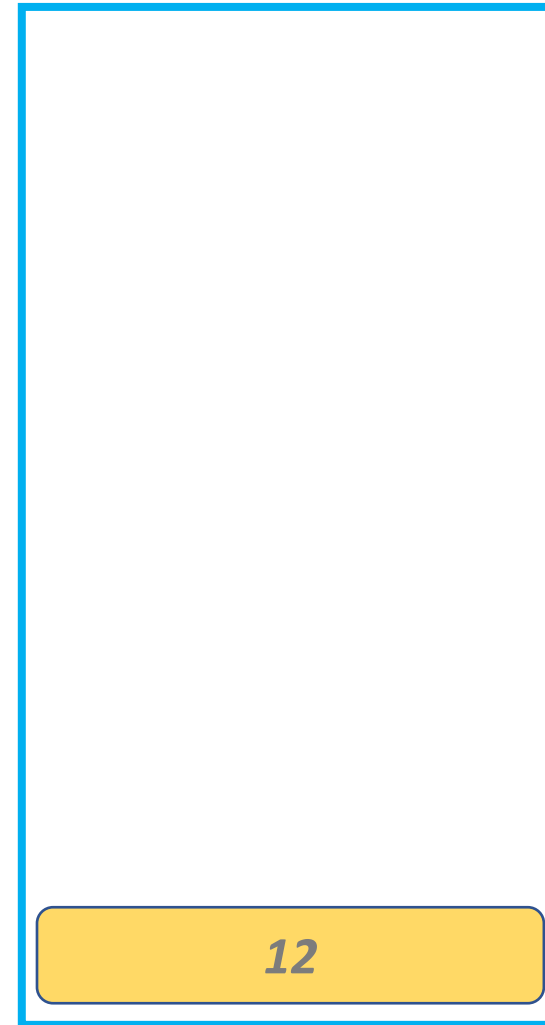


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

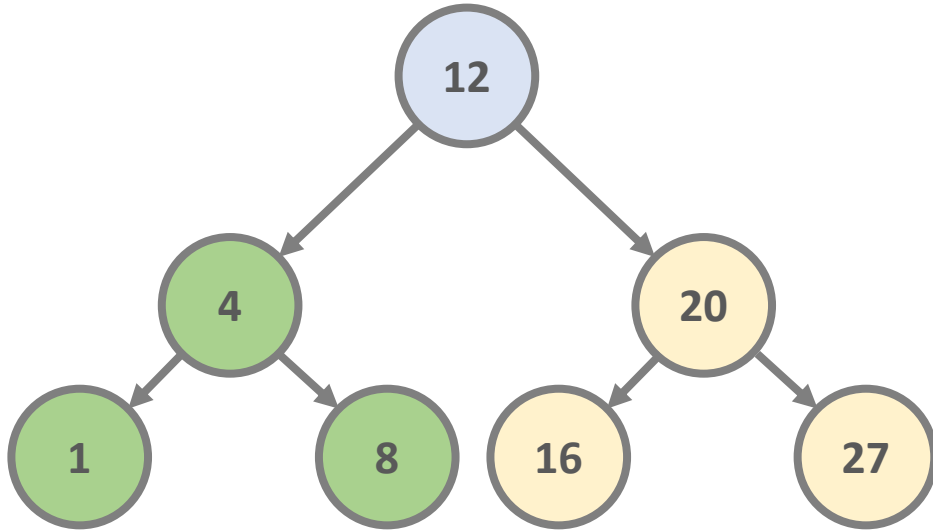
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:
traverse(node left child)

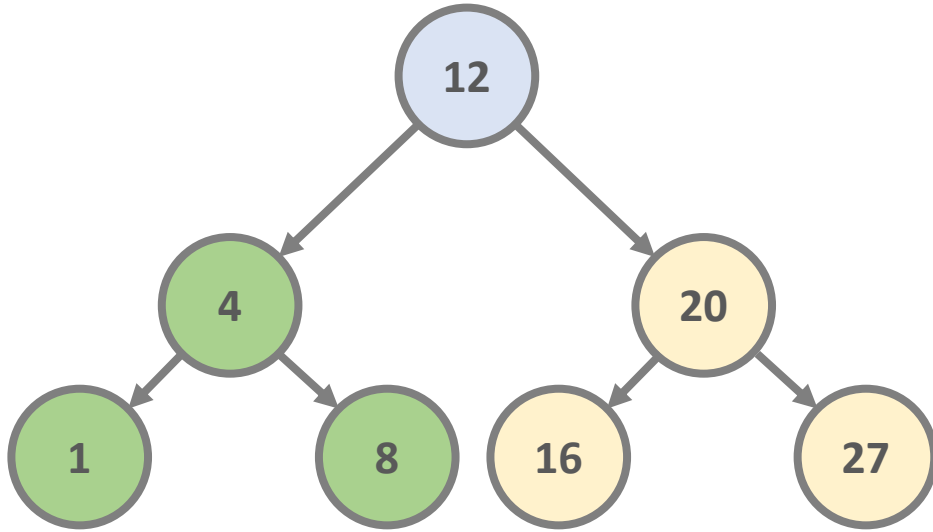
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

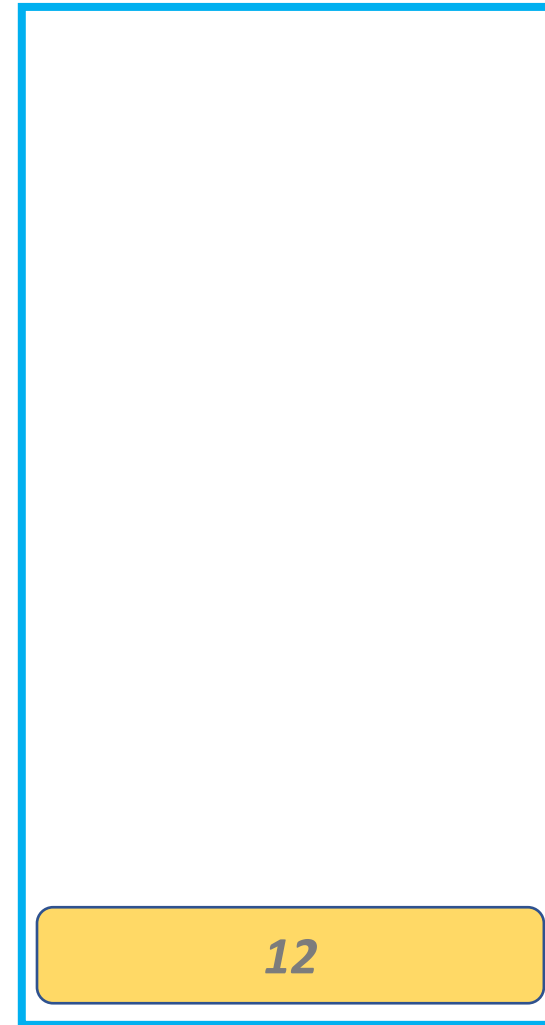


traverse(node):

if node left child is not NULL:
traverse(node left child)

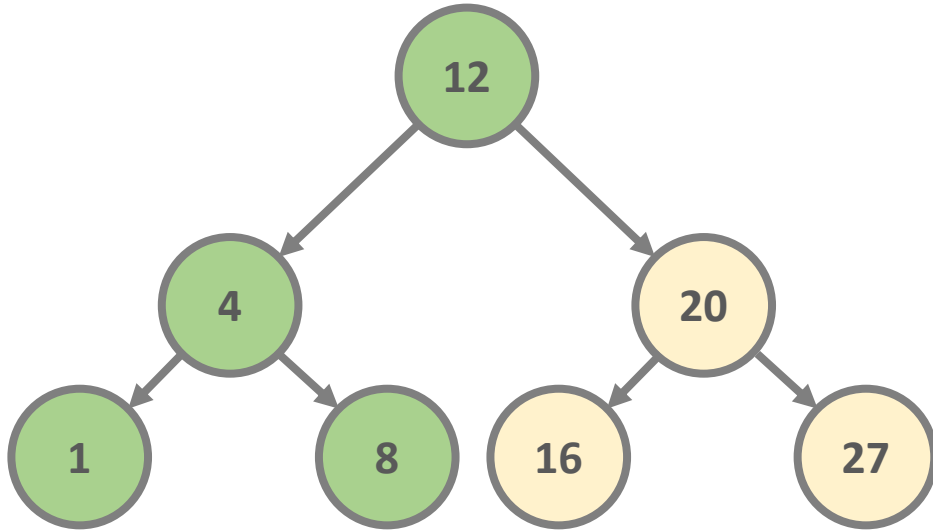
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:
traverse(node left child)

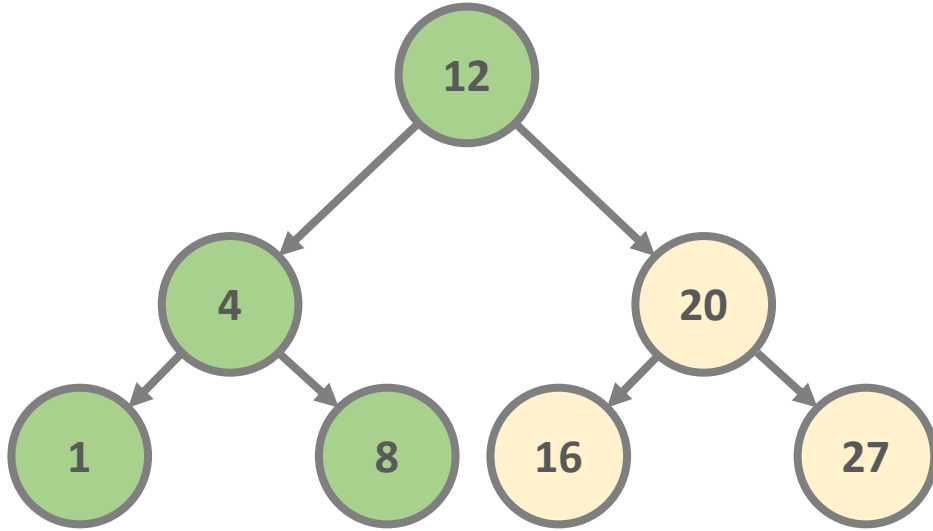
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:
traverse(node left child)

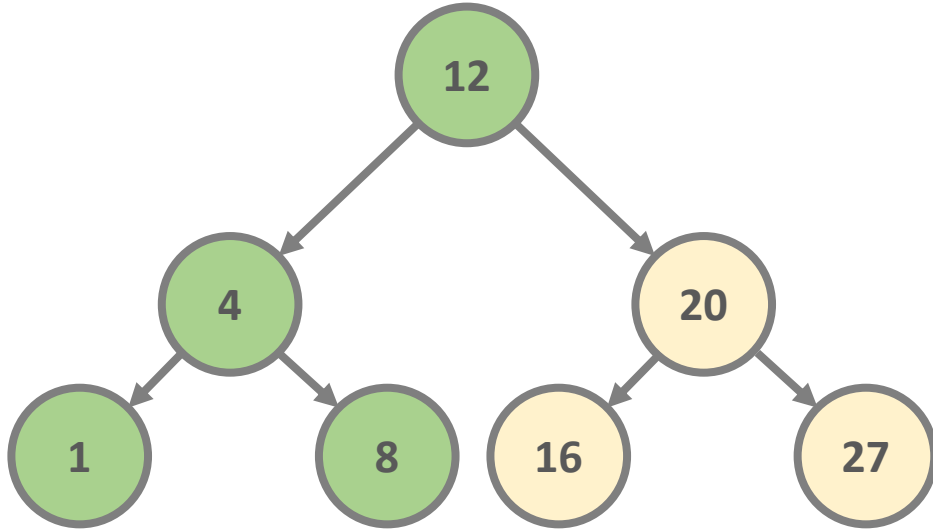
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

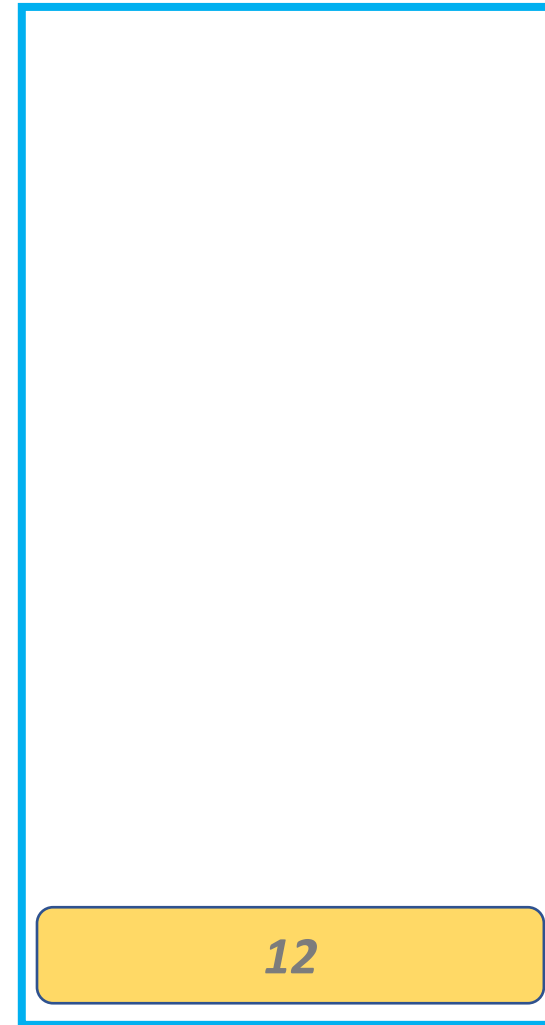


traverse(node):

if node left child is not NULL:
traverse(node left child)

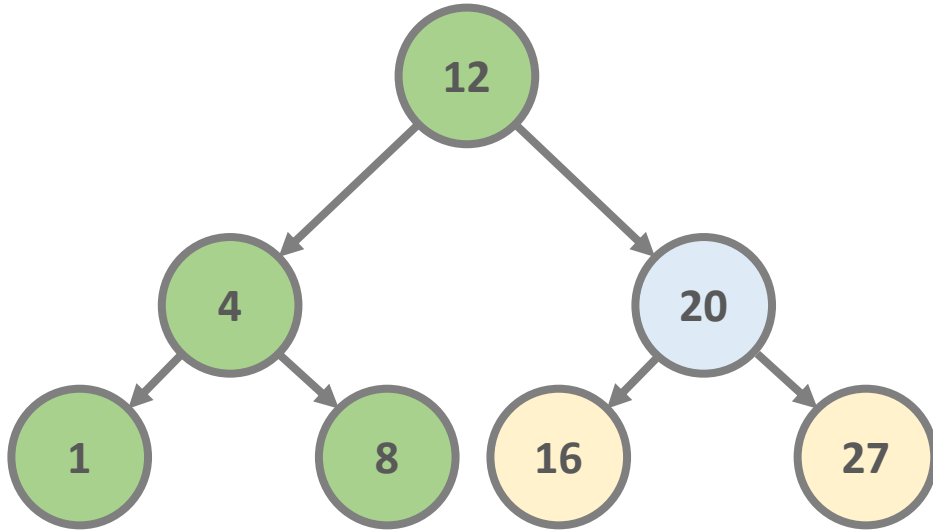
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

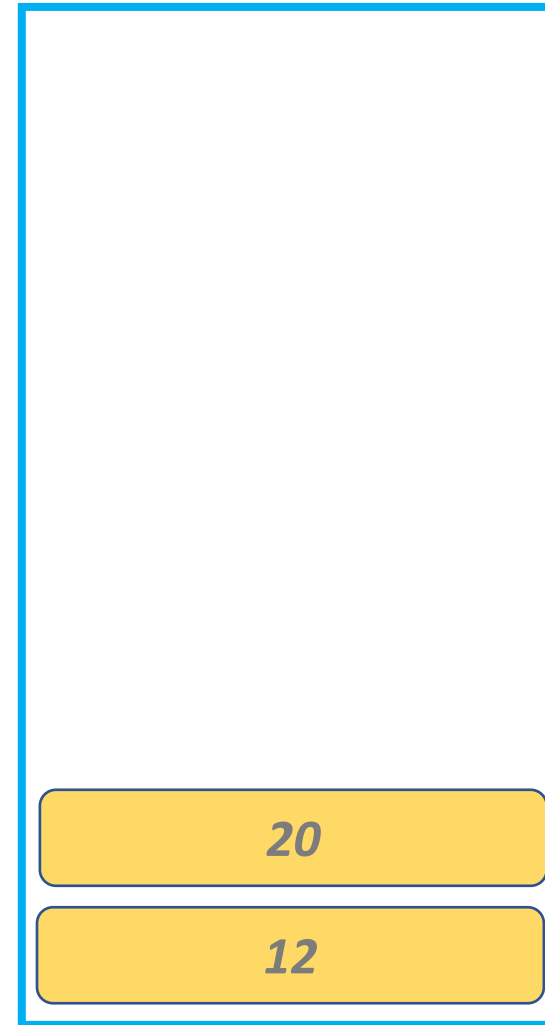


traverse(node):

if node left child is not NULL:
traverse(node left child)

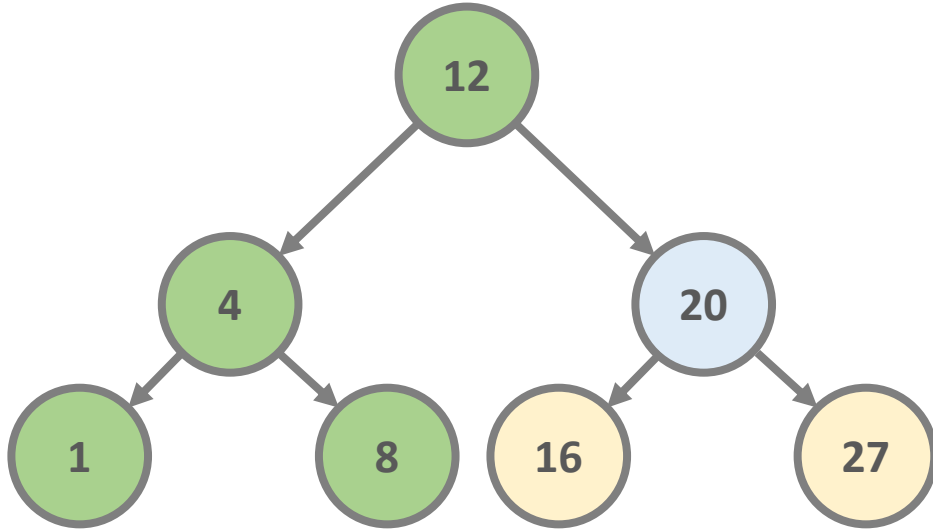
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

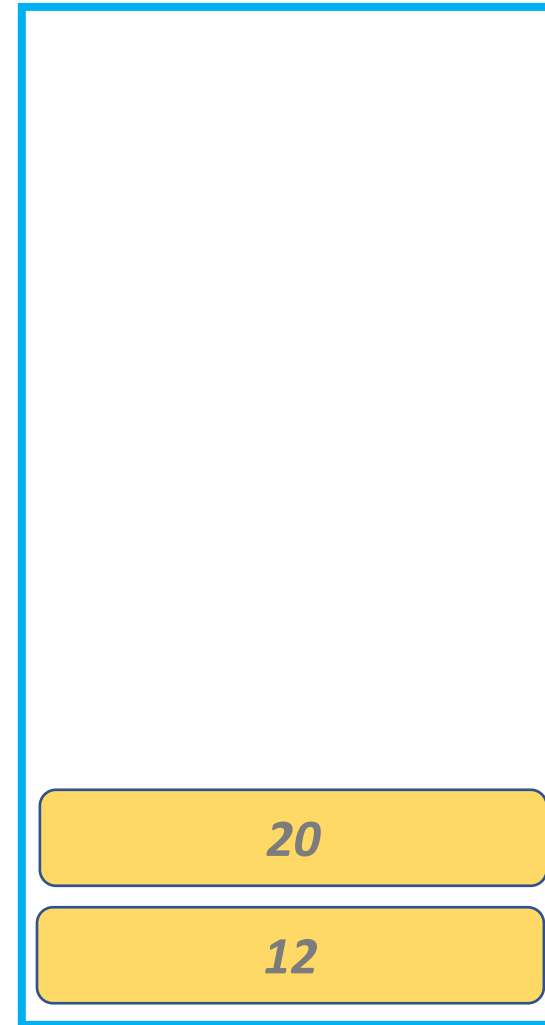


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

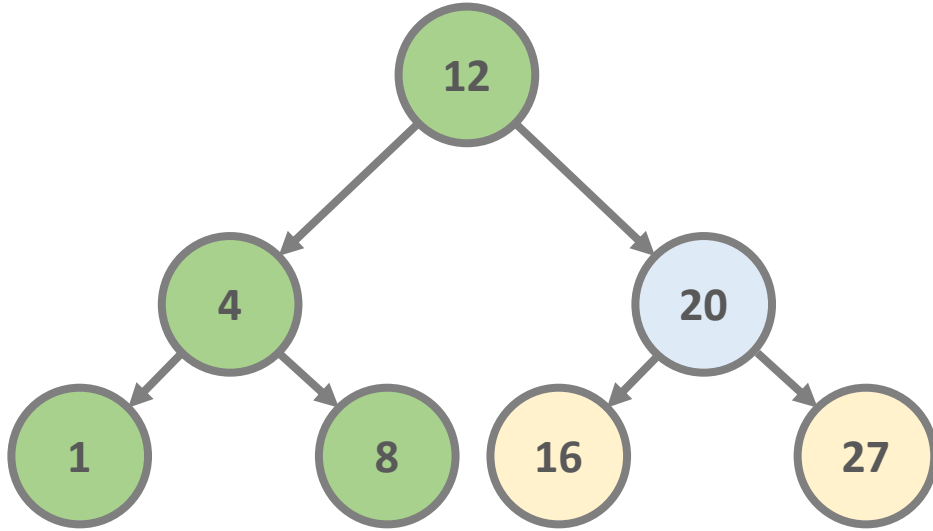
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

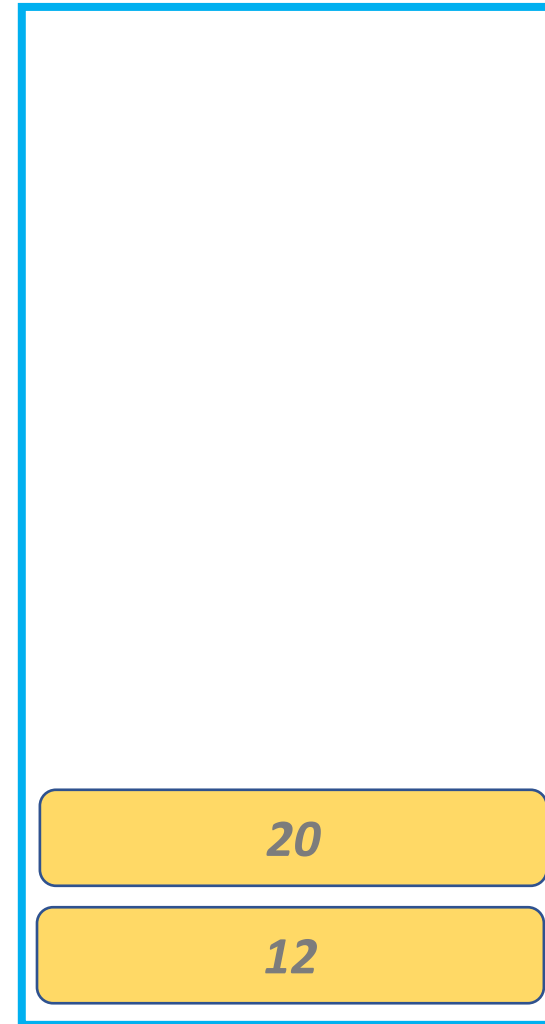
if node left child is not NULL:

traverse(node left child)

print node.data

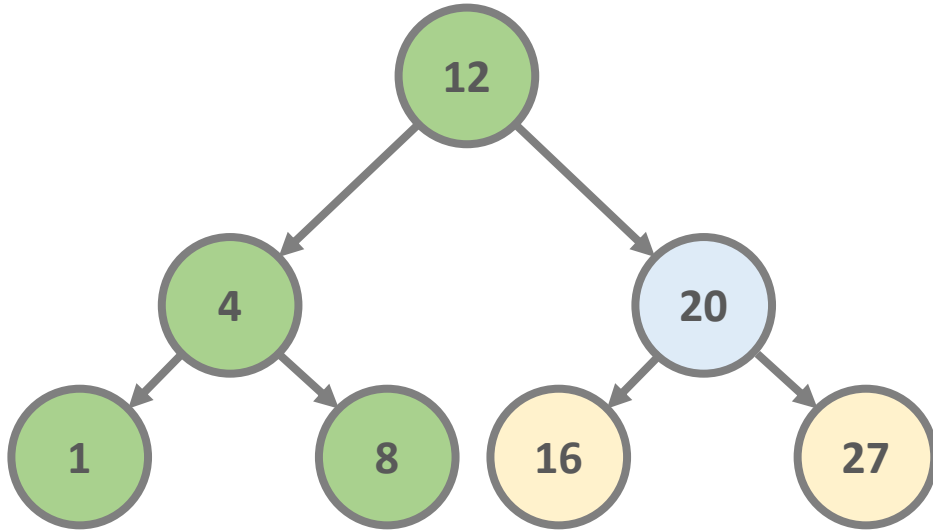
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:

traverse(node left child)

print node.data

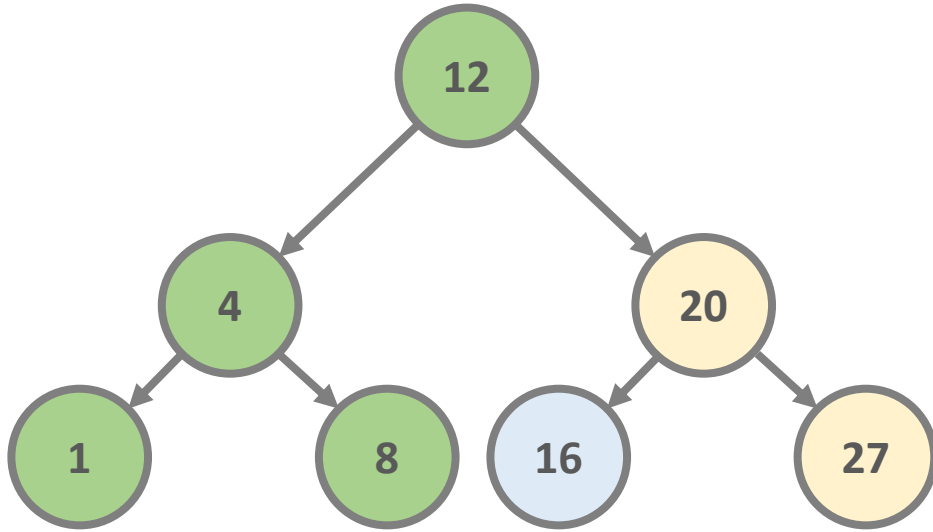
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees



traverse(node):

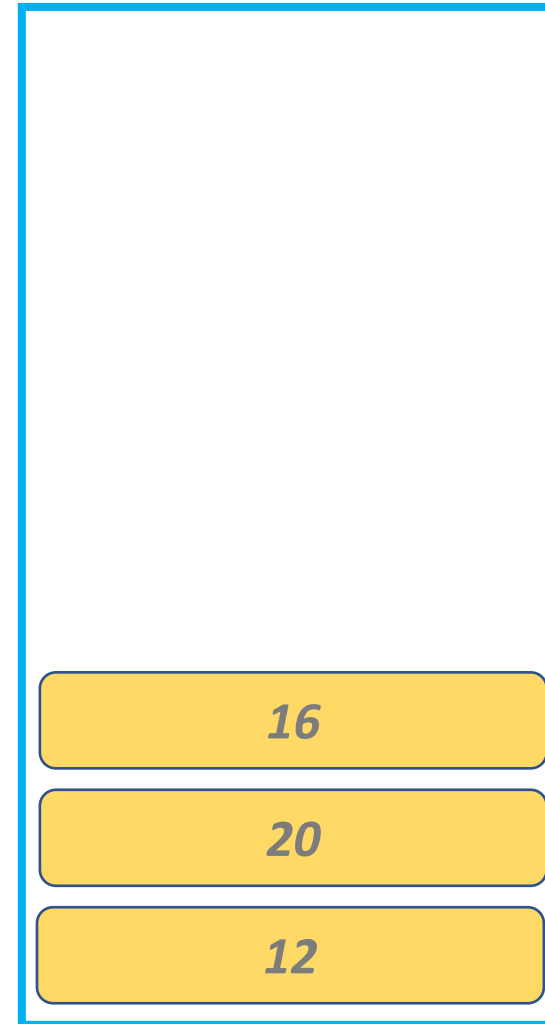
if node left child is not NULL:

traverse(node left child)

print node.data

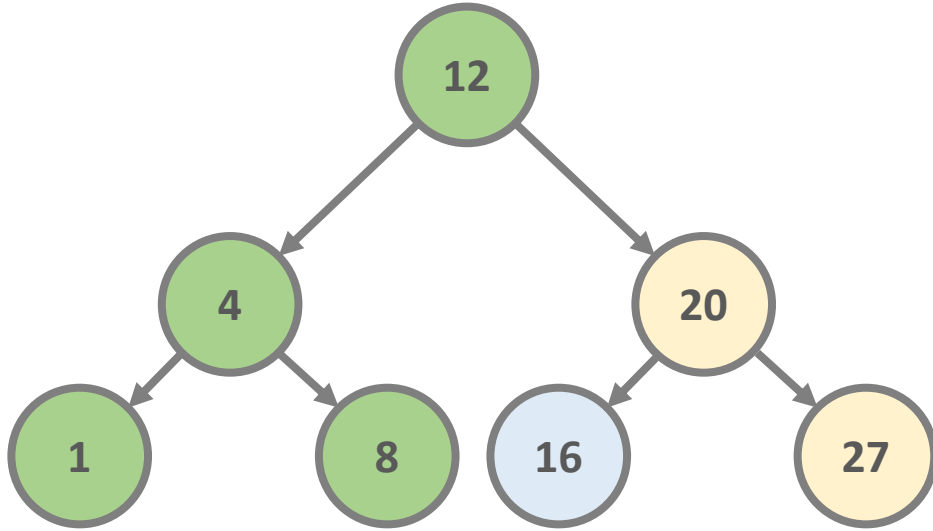
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees

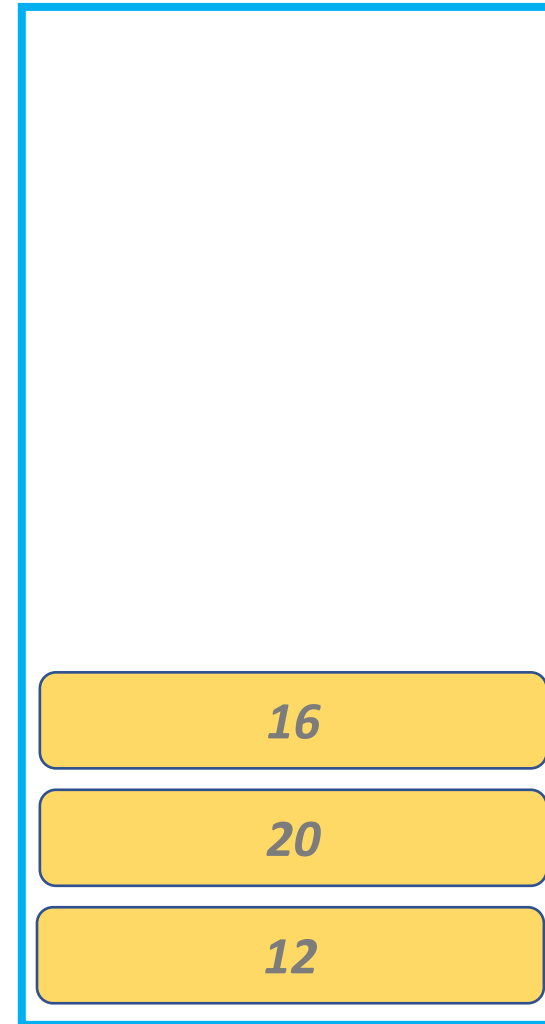


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

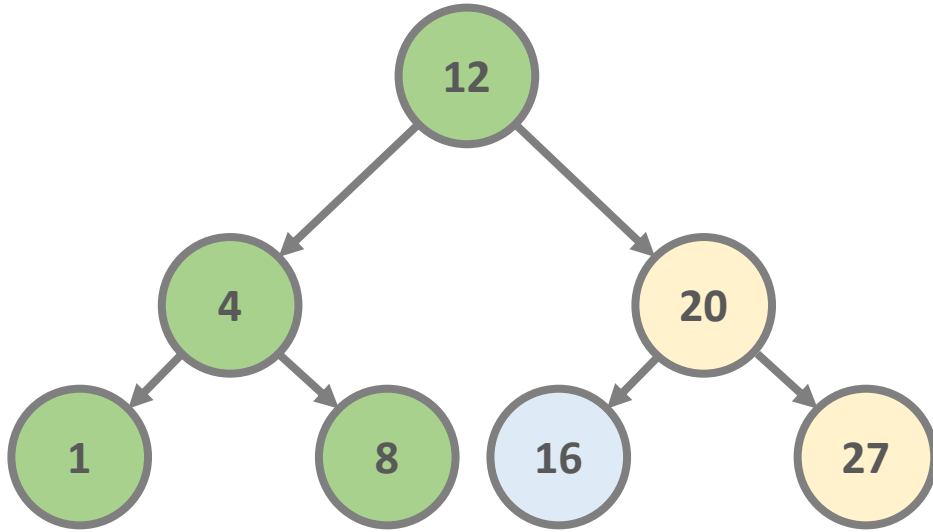
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

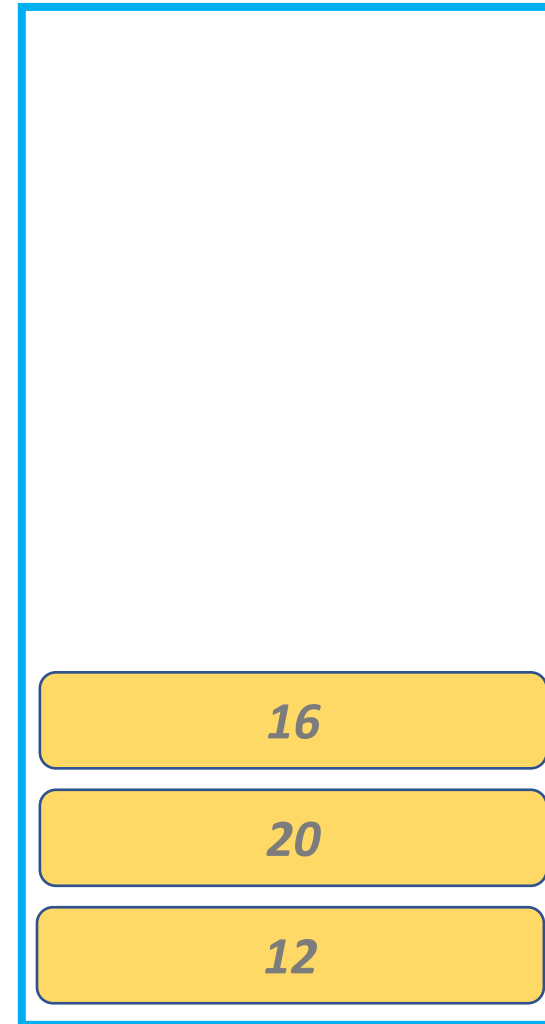
if node left child is not NULL:

traverse(node left child)

print node.data

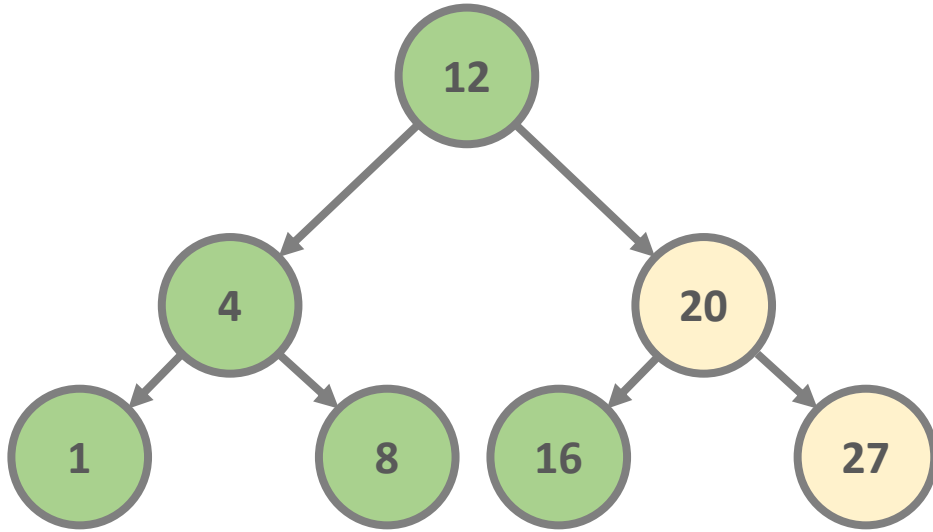
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees

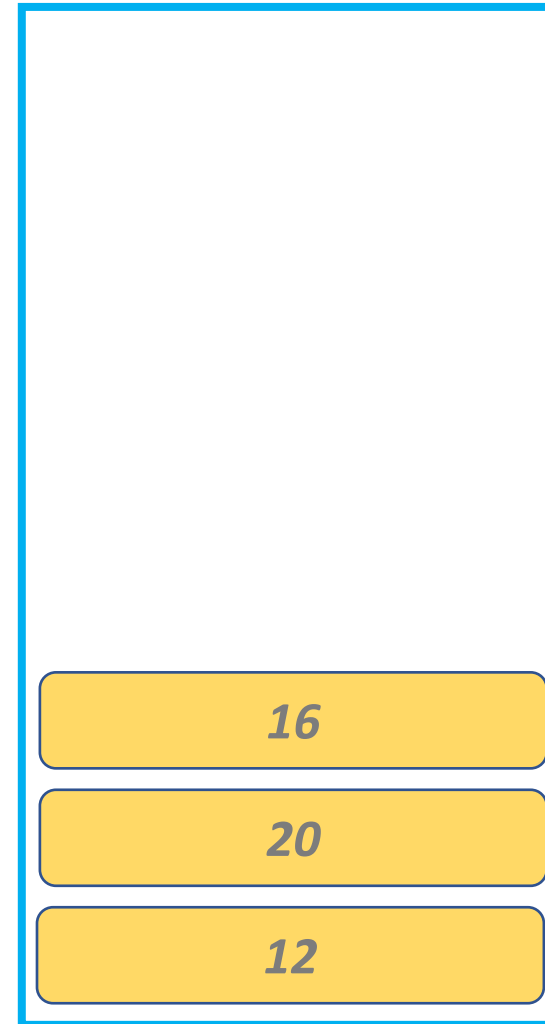


traverse(node):

if node left child is not NULL:
traverse(node left child)

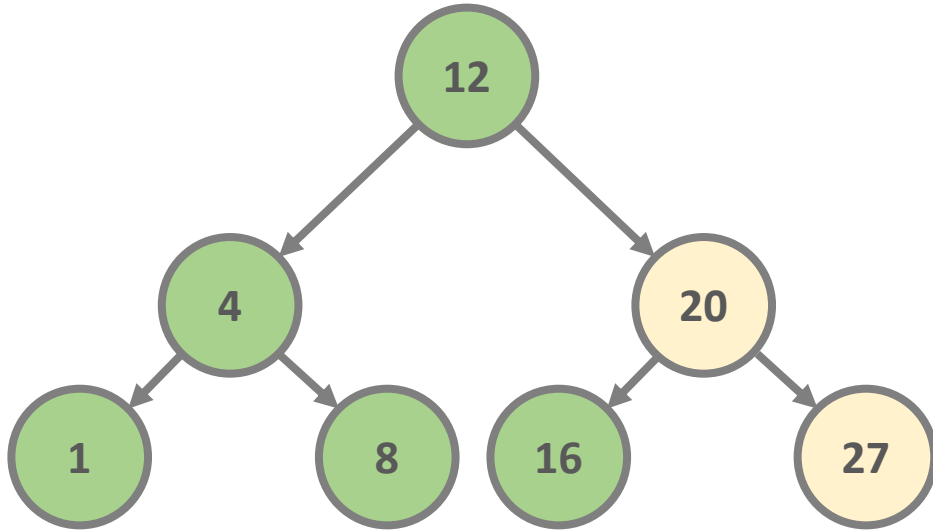
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

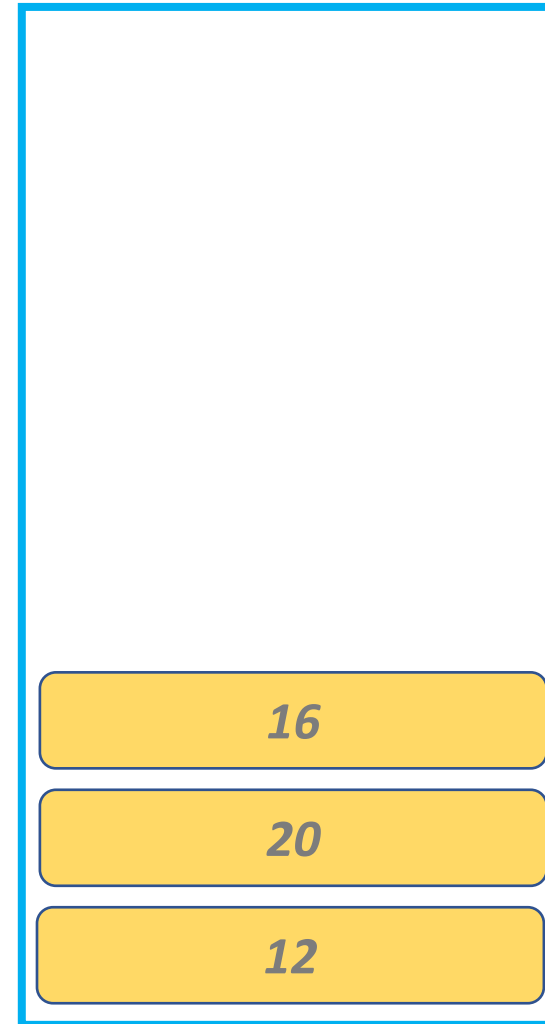


traverse(node):

if node left child is not NULL:
traverse(node left child)

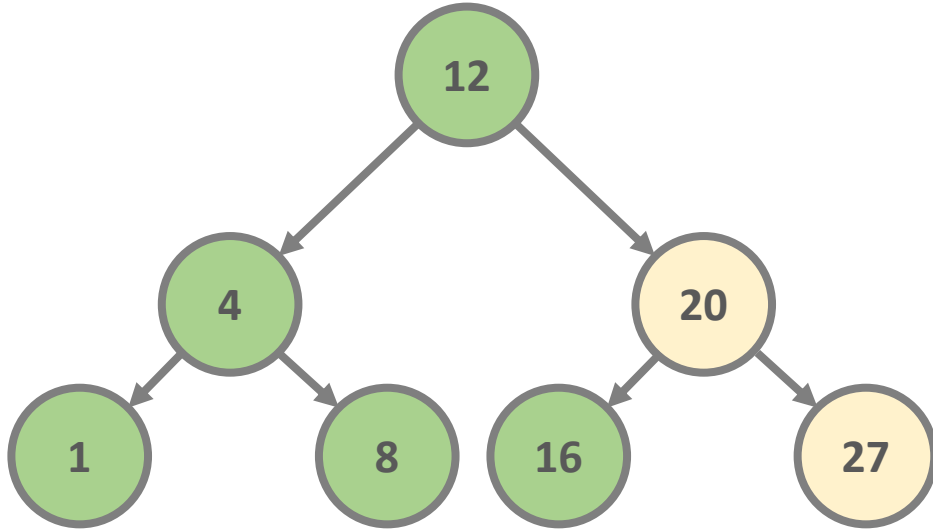
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

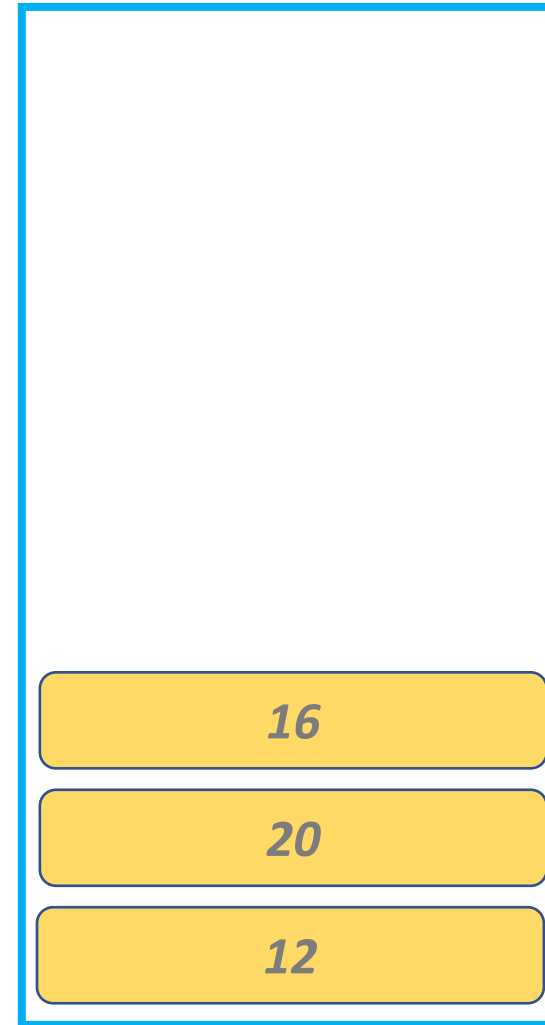


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

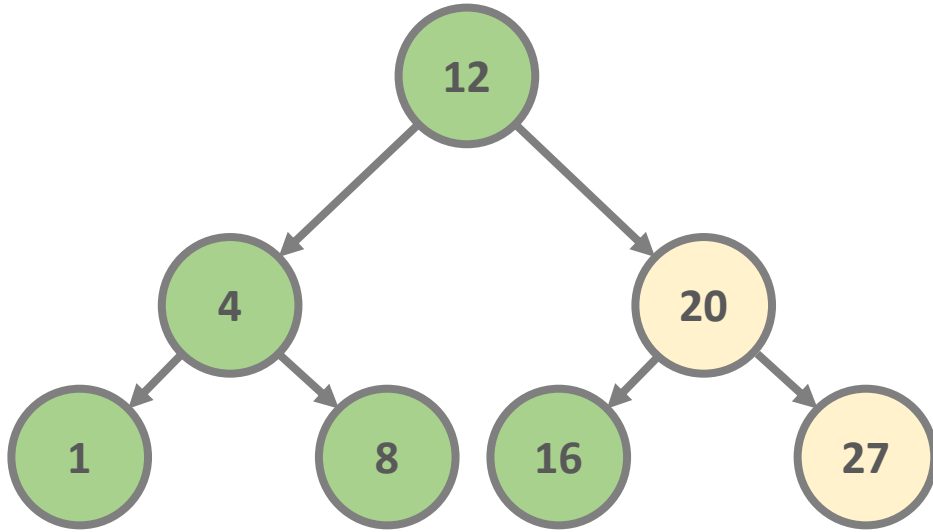
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

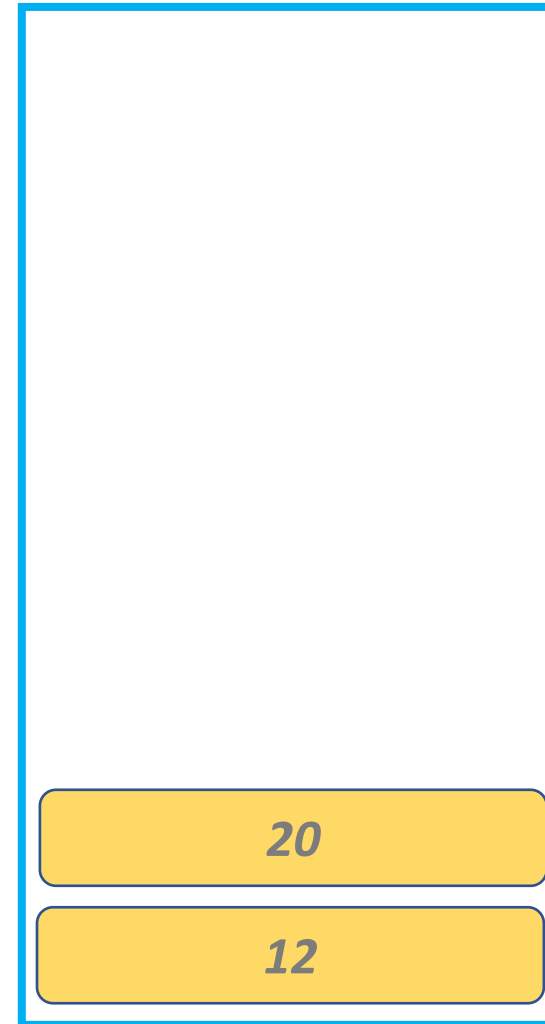


traverse(node):

if node left child is not NULL:
traverse(node left child)

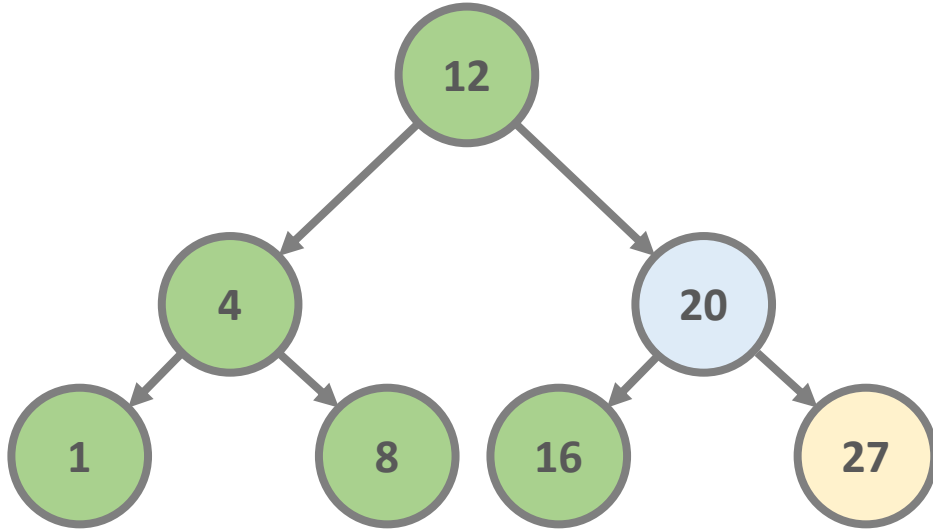
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

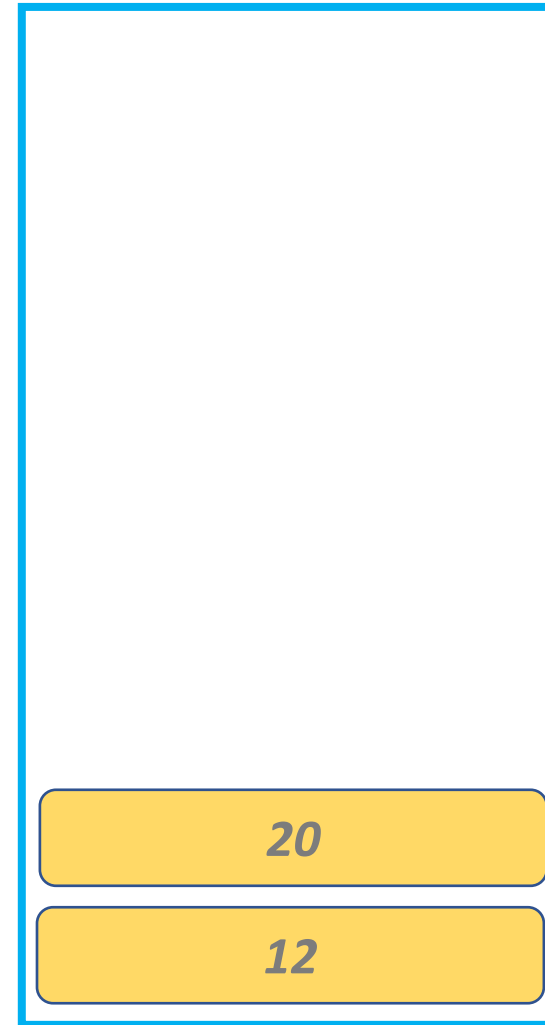


traverse(node):

if node left child is not NULL:
traverse(node left child)

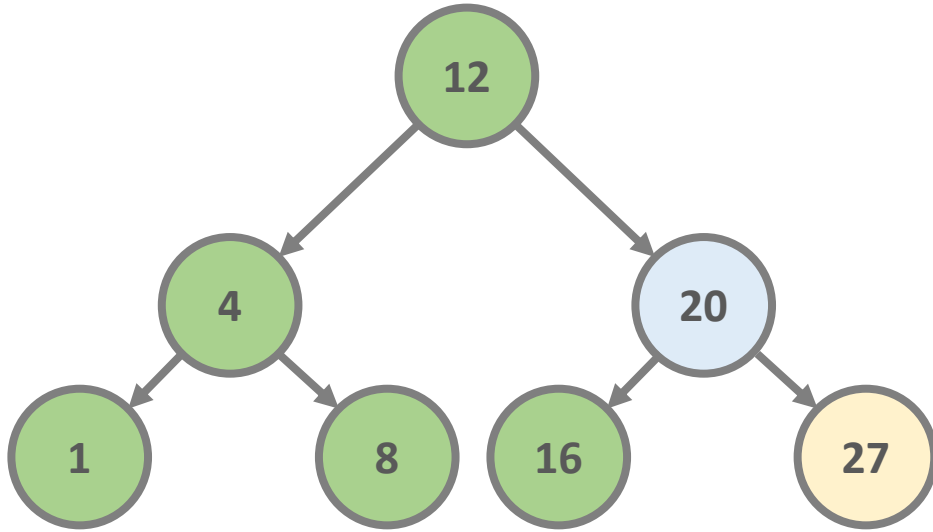
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

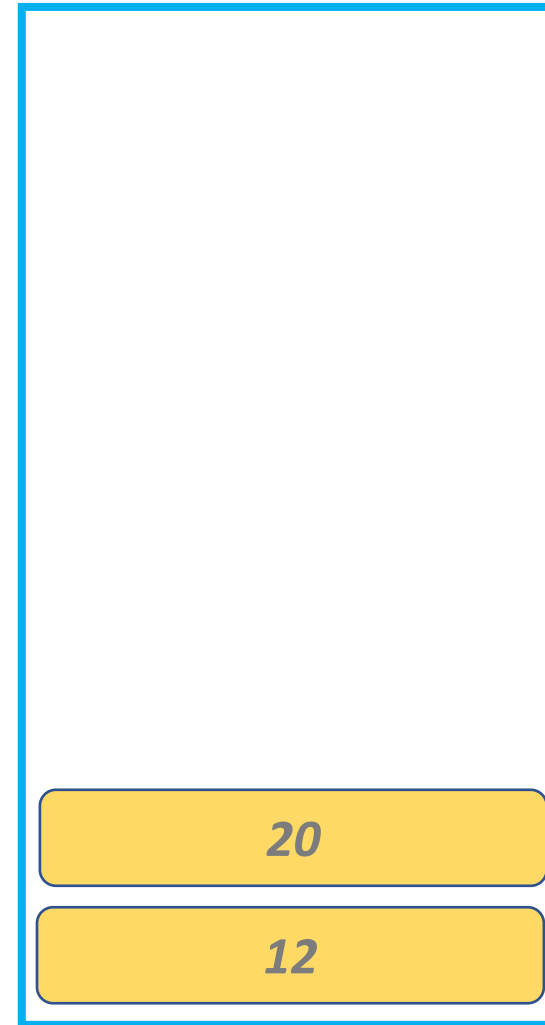


traverse(node):

if node left child is not NULL:
traverse(node left child)

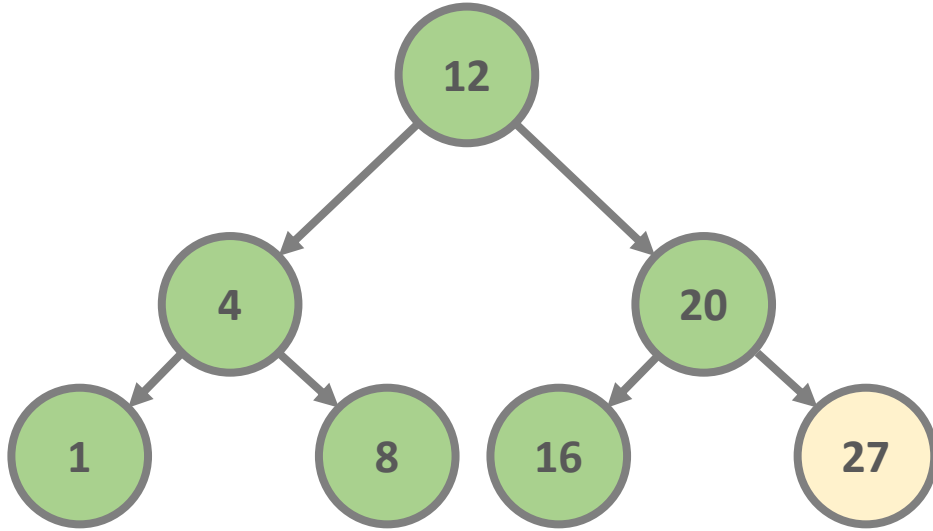
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees



traverse(node):

if node left child is not NULL:
traverse(node left child)

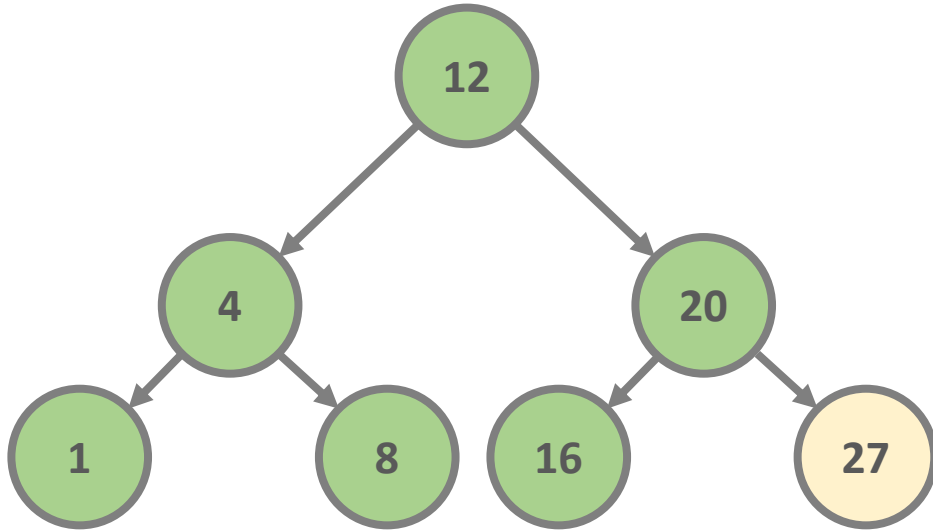
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

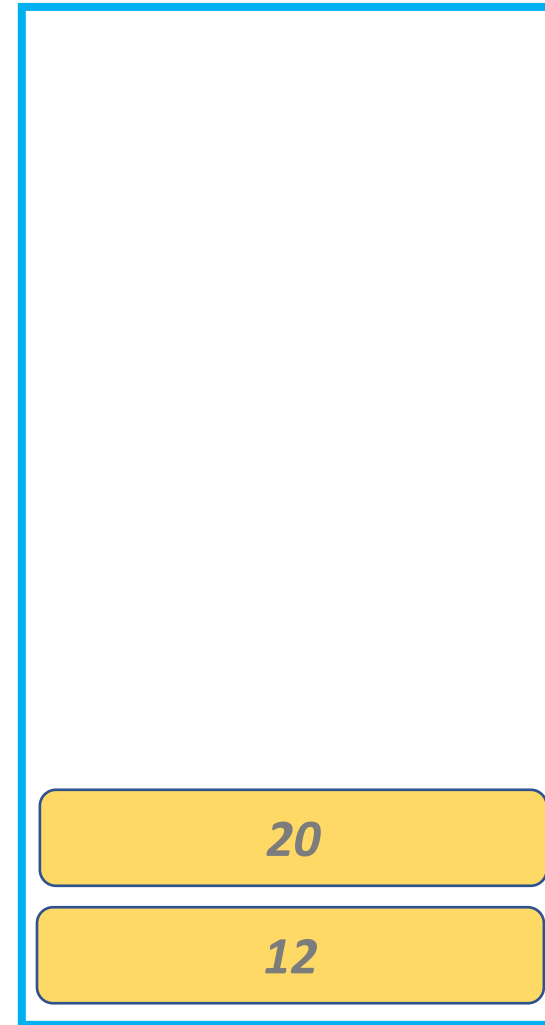


traverse(node):

if node left child is not NULL:
traverse(node left child)

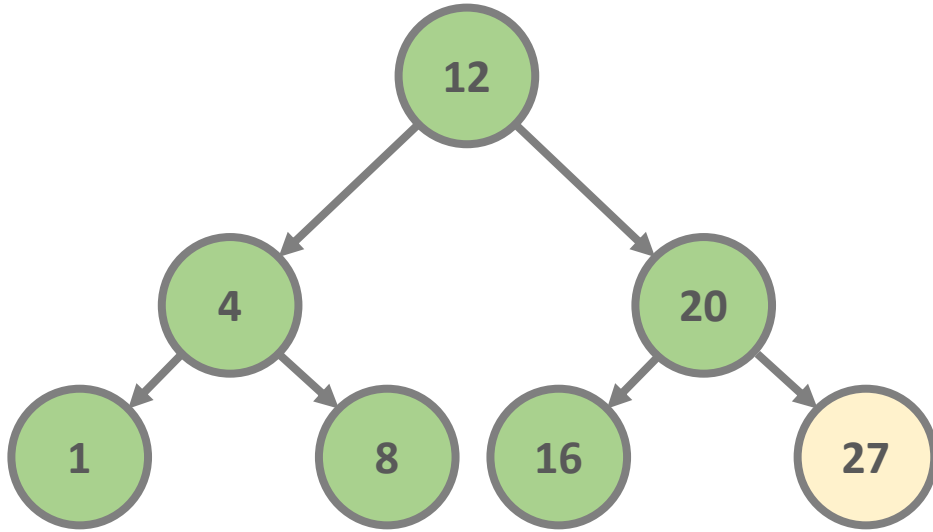
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

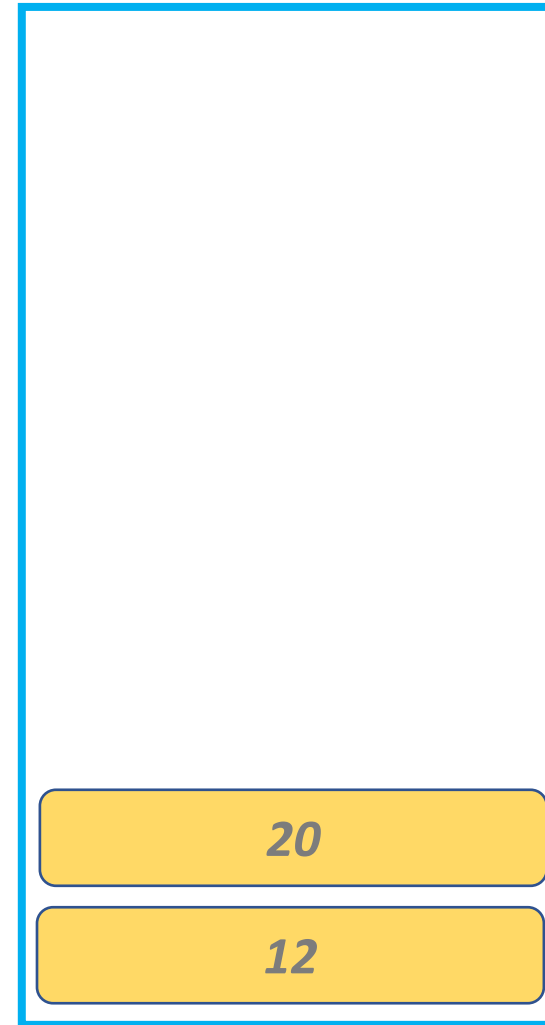


traverse(node):

if node left child is not NULL:
traverse(node left child)

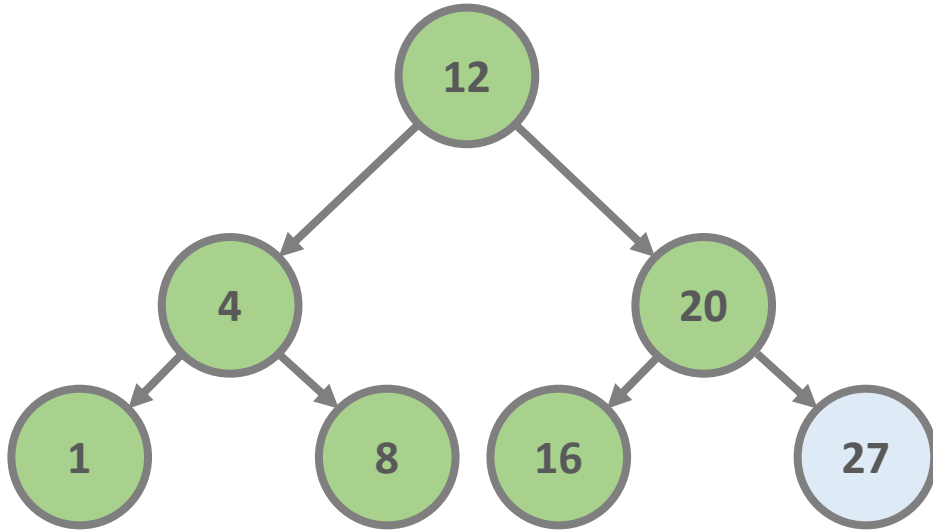
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

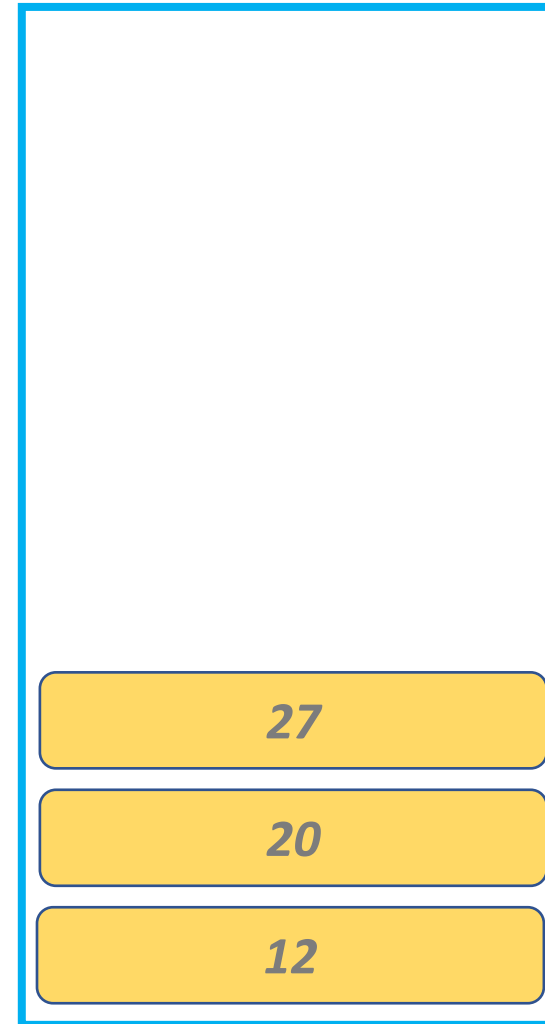


traverse(node):

if node left child is not NULL:
traverse(node left child)

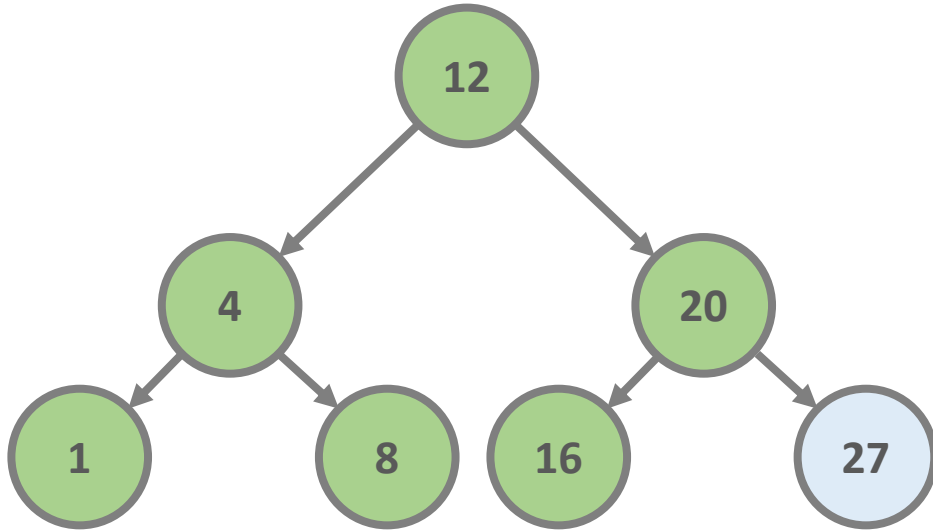
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

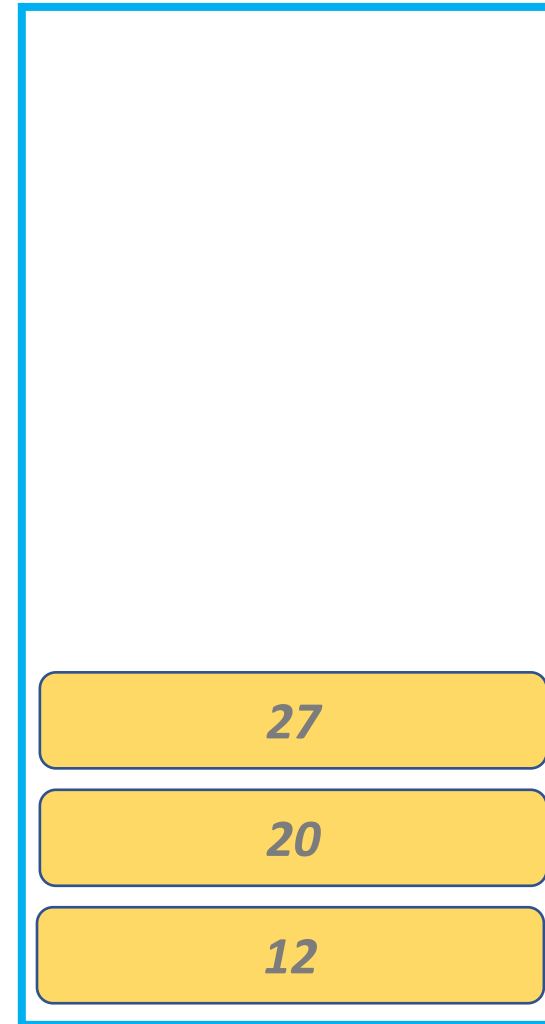


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

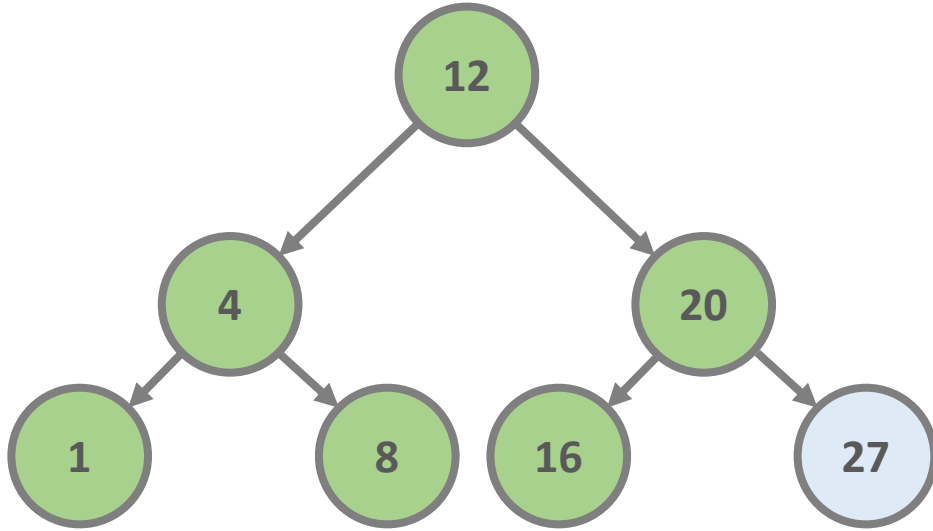
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees



traverse(node):

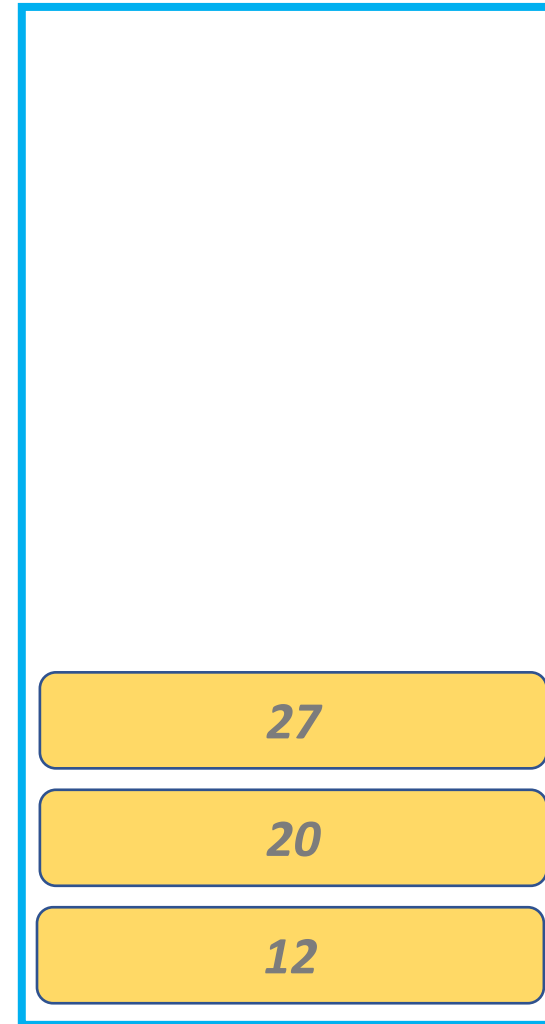
if node left child is not NULL:

traverse(node left child)

print node.data

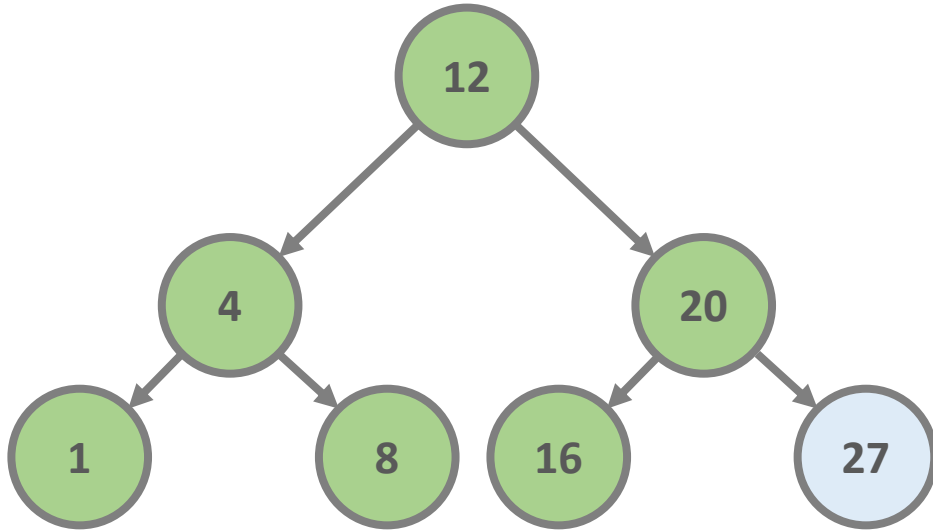
if node right child is not NULL:

traverse(node right child)



STACK

Binary Search Trees

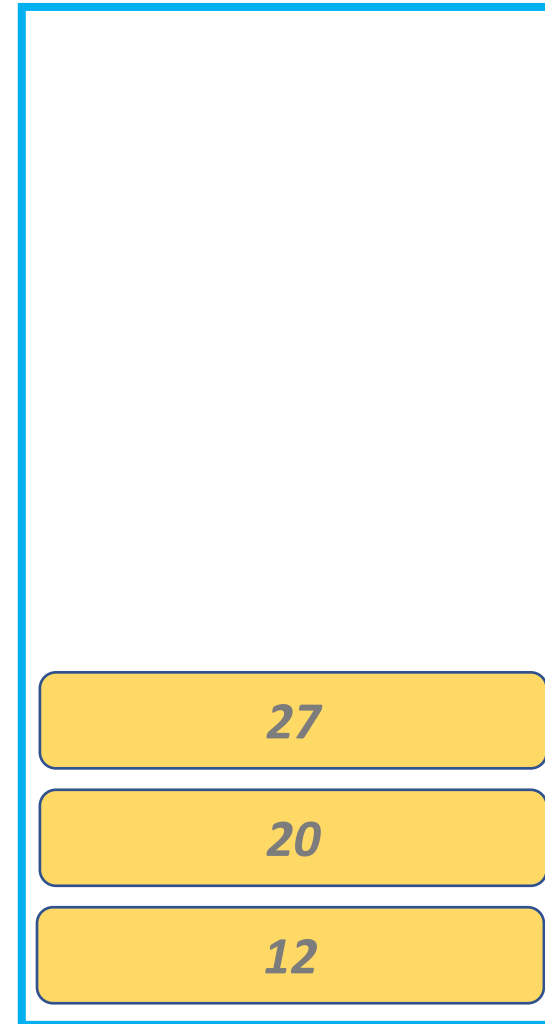


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

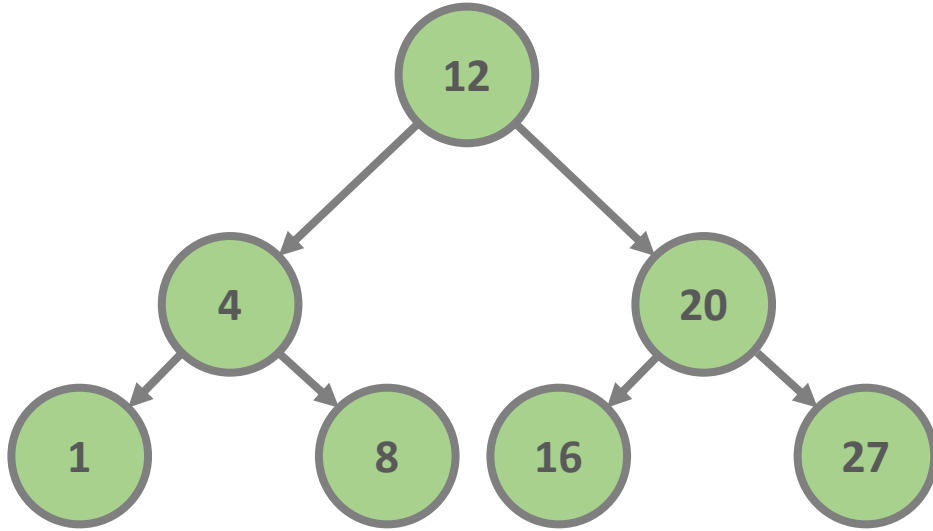
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

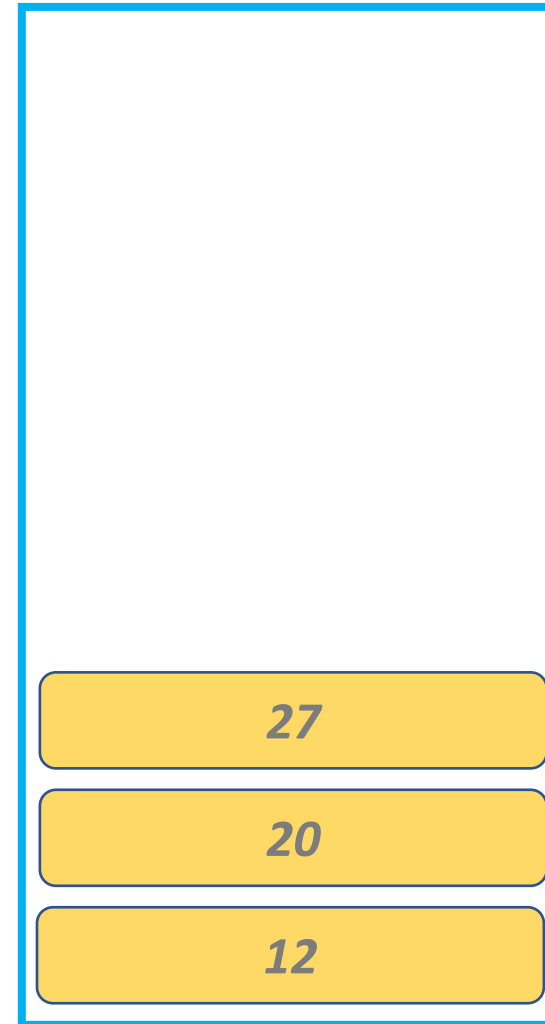


traverse(node):

if node left child is not NULL:
traverse(node left child)

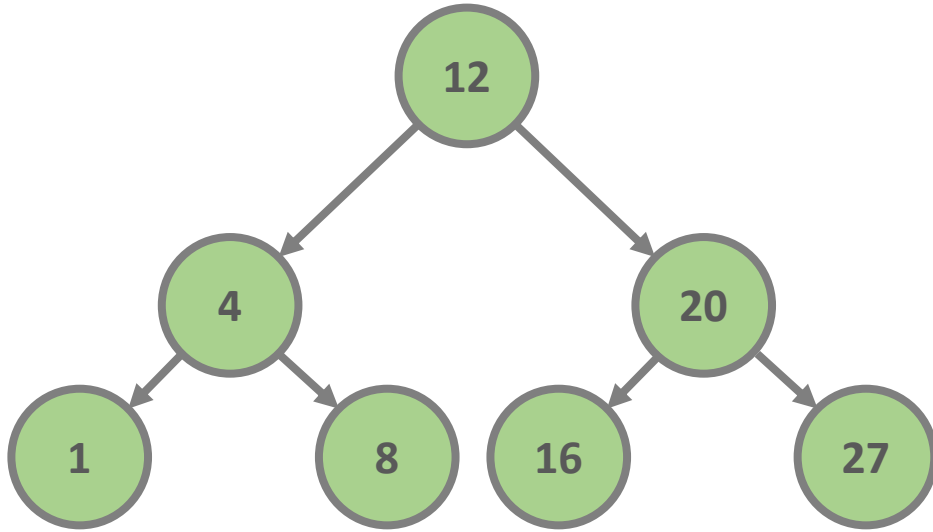
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

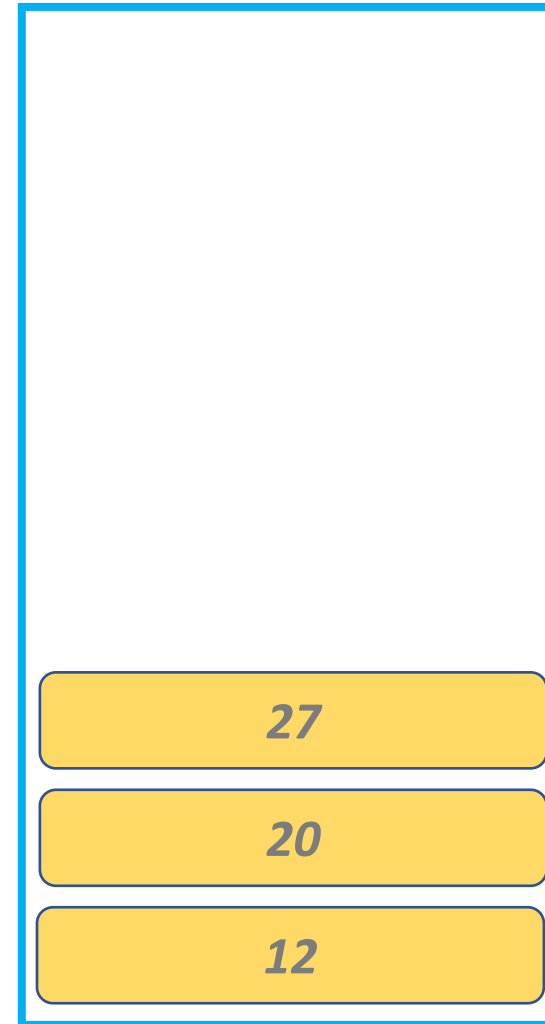


traverse(node):

if node left child is not NULL:
traverse(node left child)

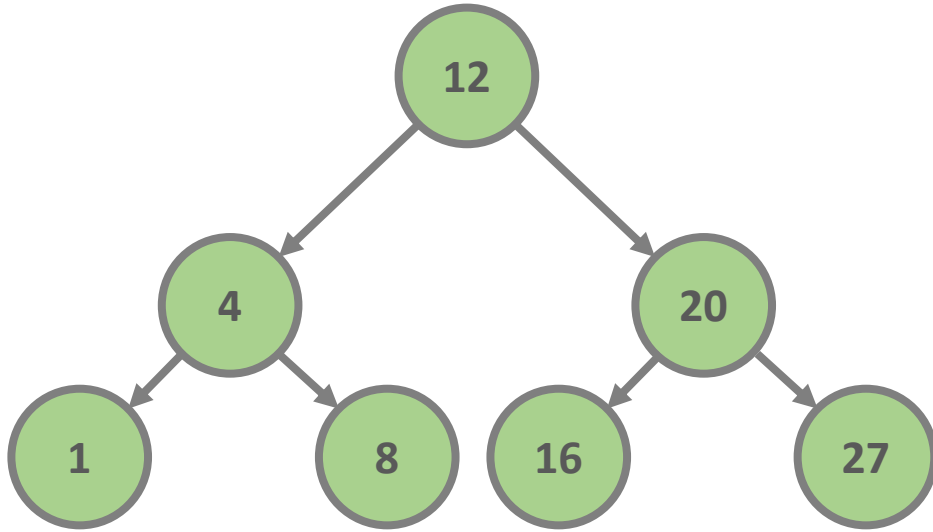
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STACK

Binary Search Trees

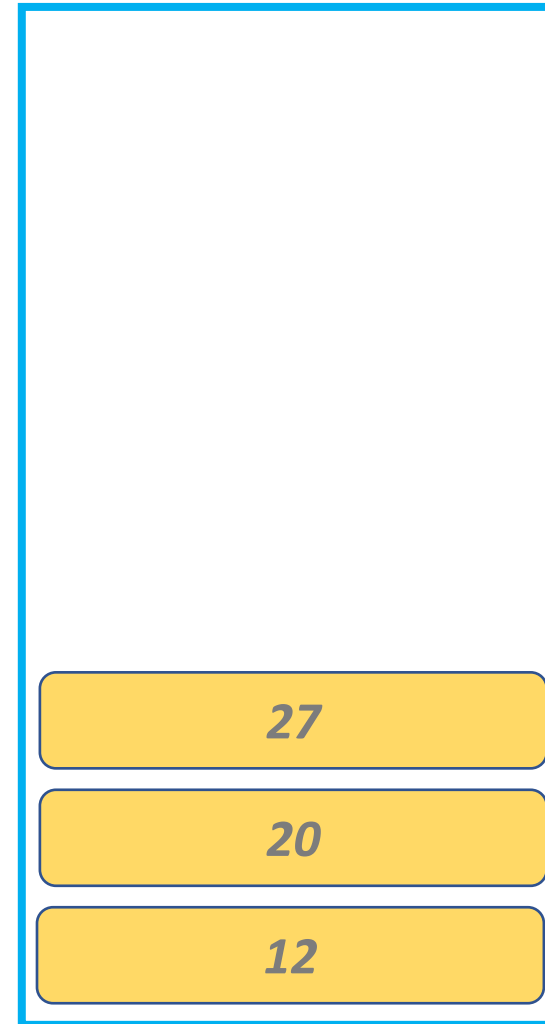


traverse(node):

if node left child is not NULL:
traverse(node left child)

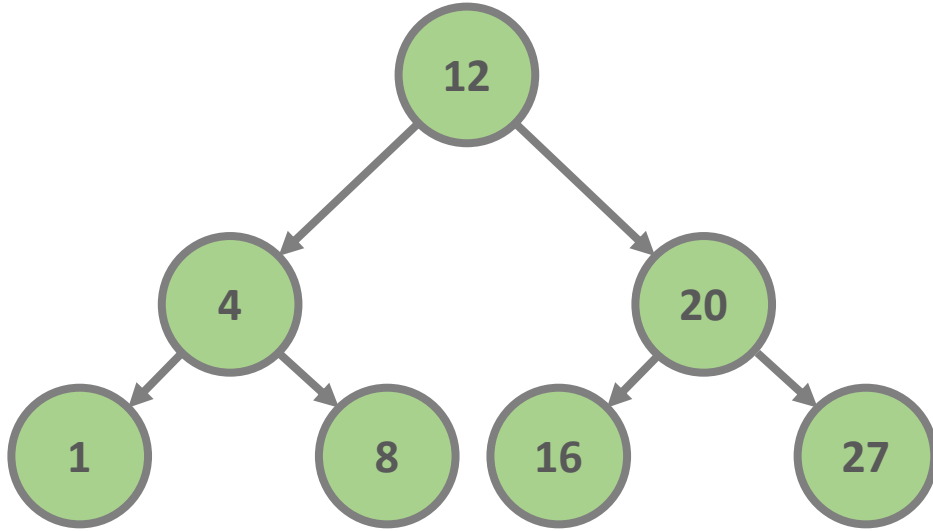
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees

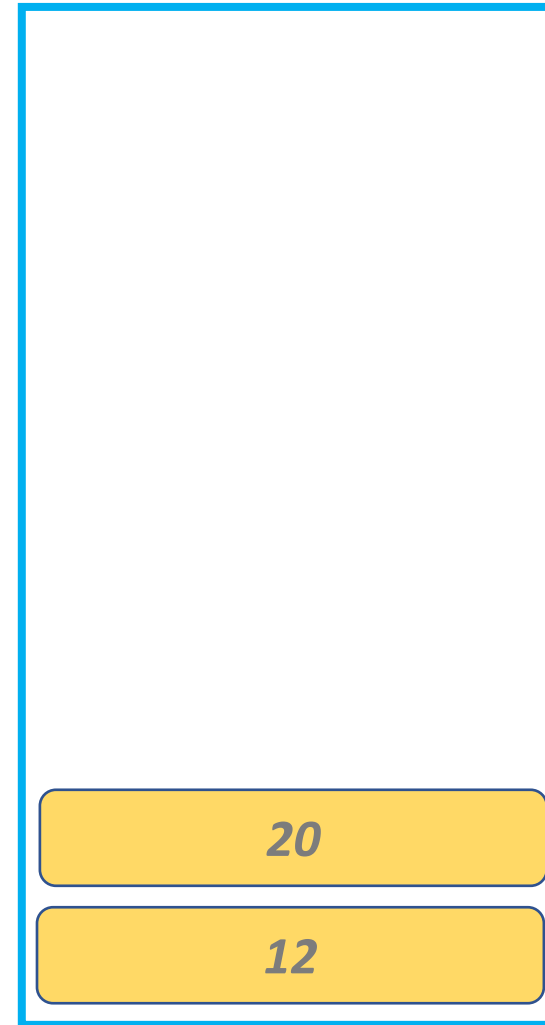


traverse(node):

if node left child is not NULL:
traverse(node left child)

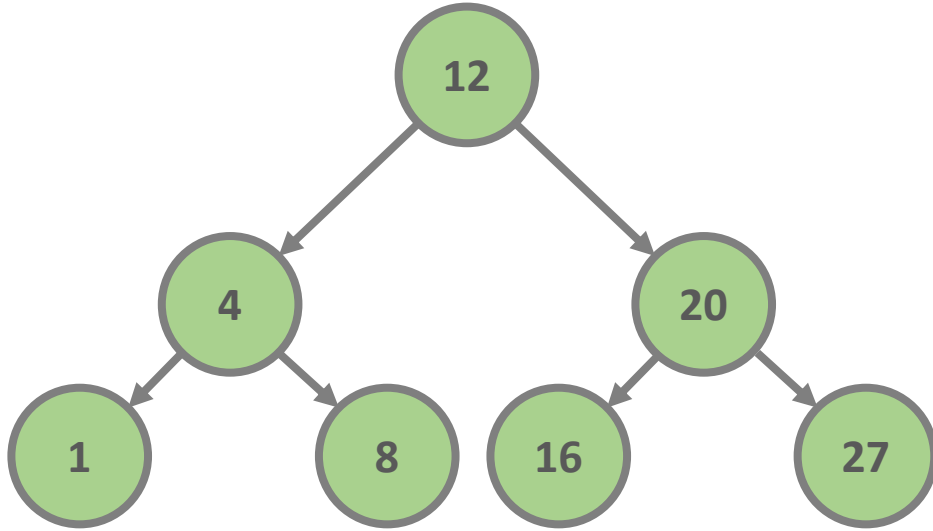
print node.data

if node right child is not NULL:
traverse(node right child)



STACK

Binary Search Trees



traverse(node):

*if node left child is not NULL:
traverse(node left child)*

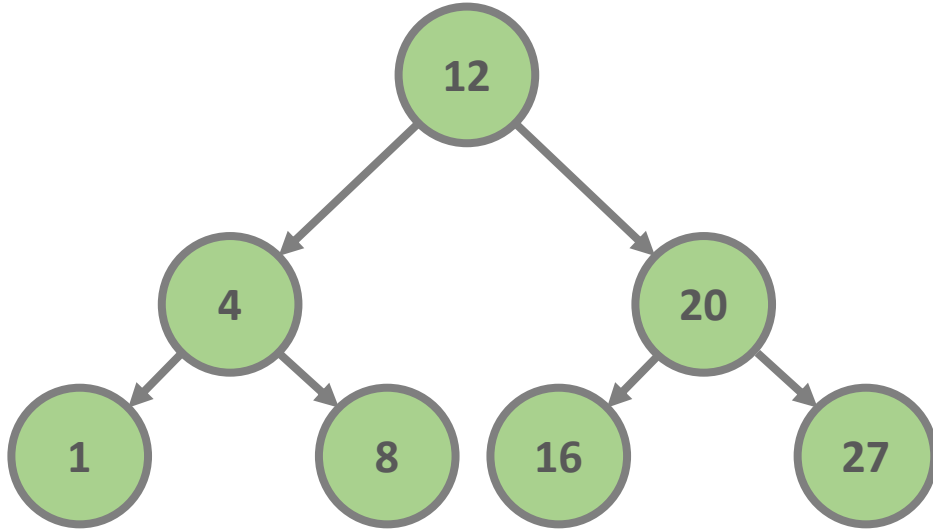
print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK

Binary Search Trees

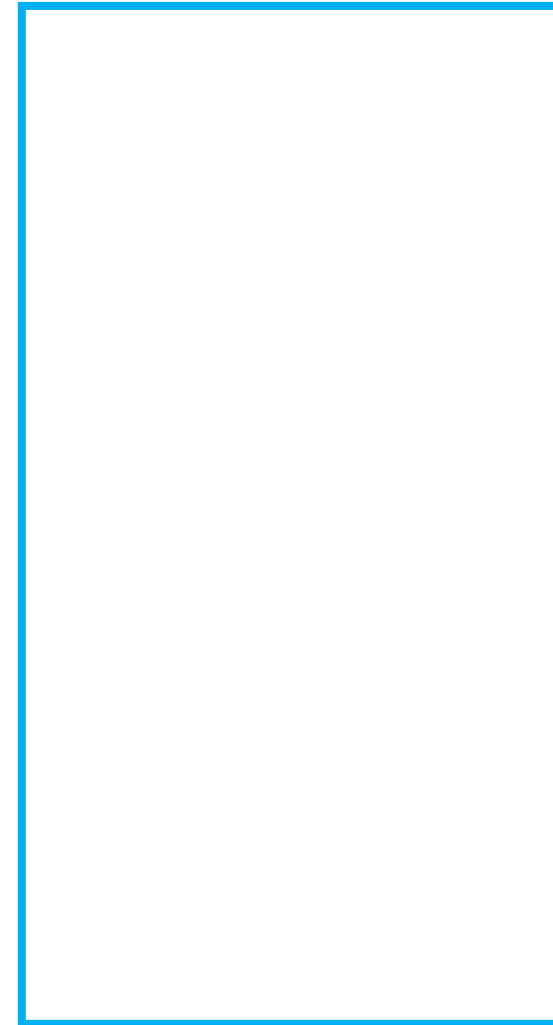


traverse(node):

*if node left child is not NULL:
traverse(node left child)*

print node.data

*if node right child is not NULL:
traverse(node right child)*



STACK