

[320] Search Order and Queue Structures

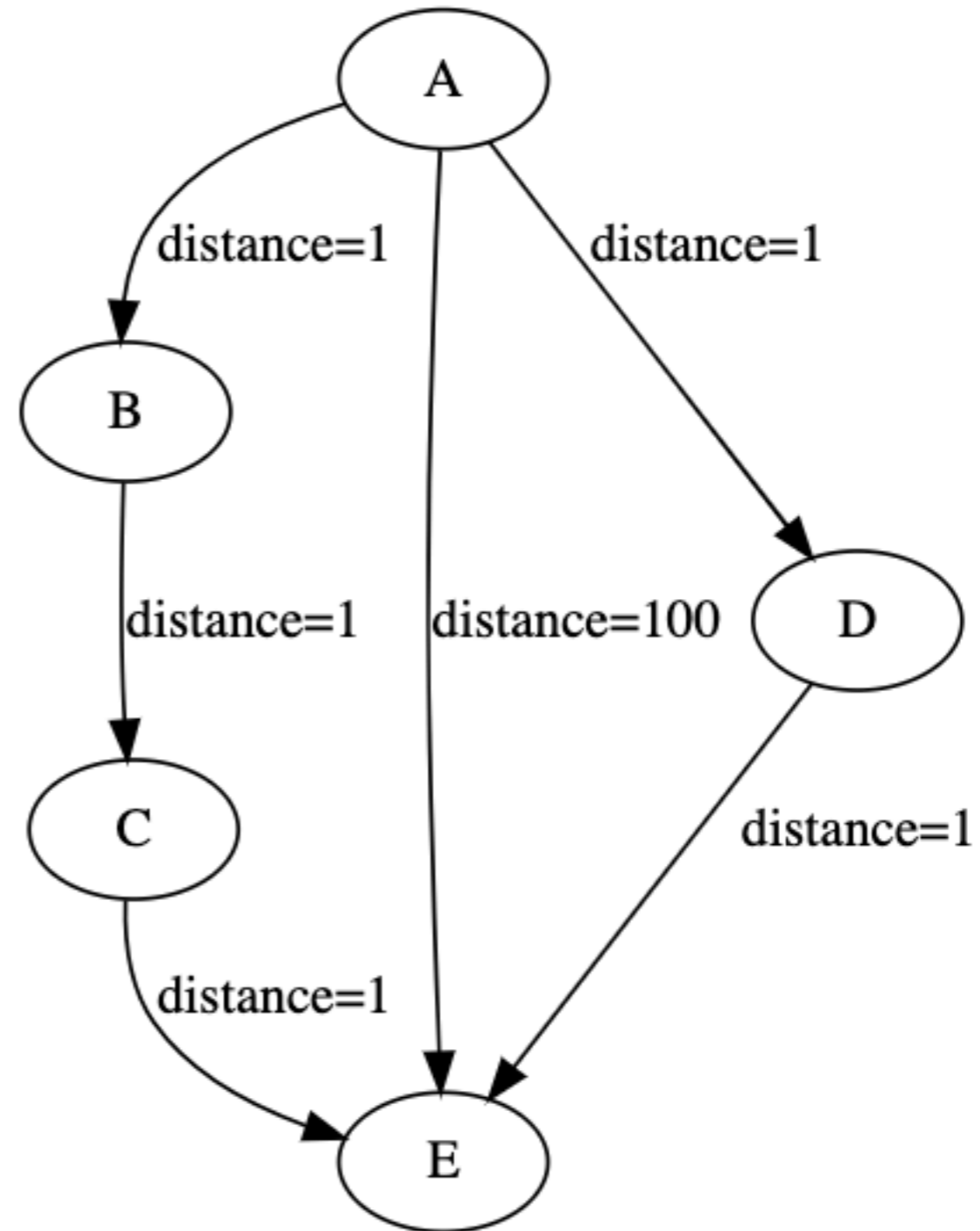
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Shortest Weighted Path

What path will DFS choose?

What path will BFS choose?

What path would you choose?



Your task queue ("to do" list)

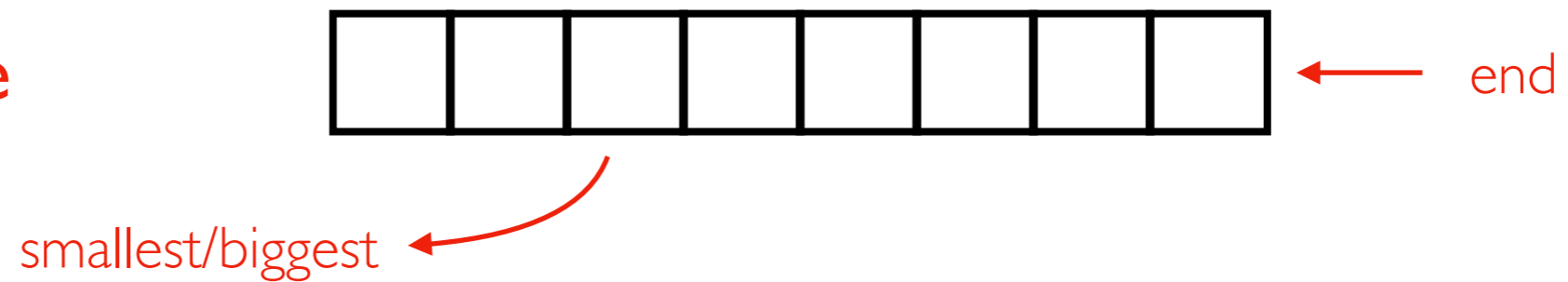
Stack
(FILO)



Queue
(FIFO)



Priority Queue



Your task queue ("to do" list)

Stack
(FILO)



```
L.append(x)
```

```
x = L.pop(-1)
```

Queue
(FIFO)

front ←



```
x = L.pop(0)
```

```
L.append(x)
```

Priority Queue

smallest/biggest ←



```
L.sort()  
x = L.pop(-1)
```

```
L.append(x)
```

```
L.append(x)
```

what operations are slow?

Your task queue ("to do" list)

Stack
(FILO)



```
L.append(x)
```

← end

← end

```
x = L.pop(-1)
```

Queue
(FIFO)

front ←



← end



```
x = L.pop(0)
```

```
L.append(x)
```

Priority Queue



← end

smallest/biggest ←



```
L.sort()  
x = L.pop(-1)
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```
L.append(x)
```

what operations are slow?