

[320] Search Order and Queue Structures

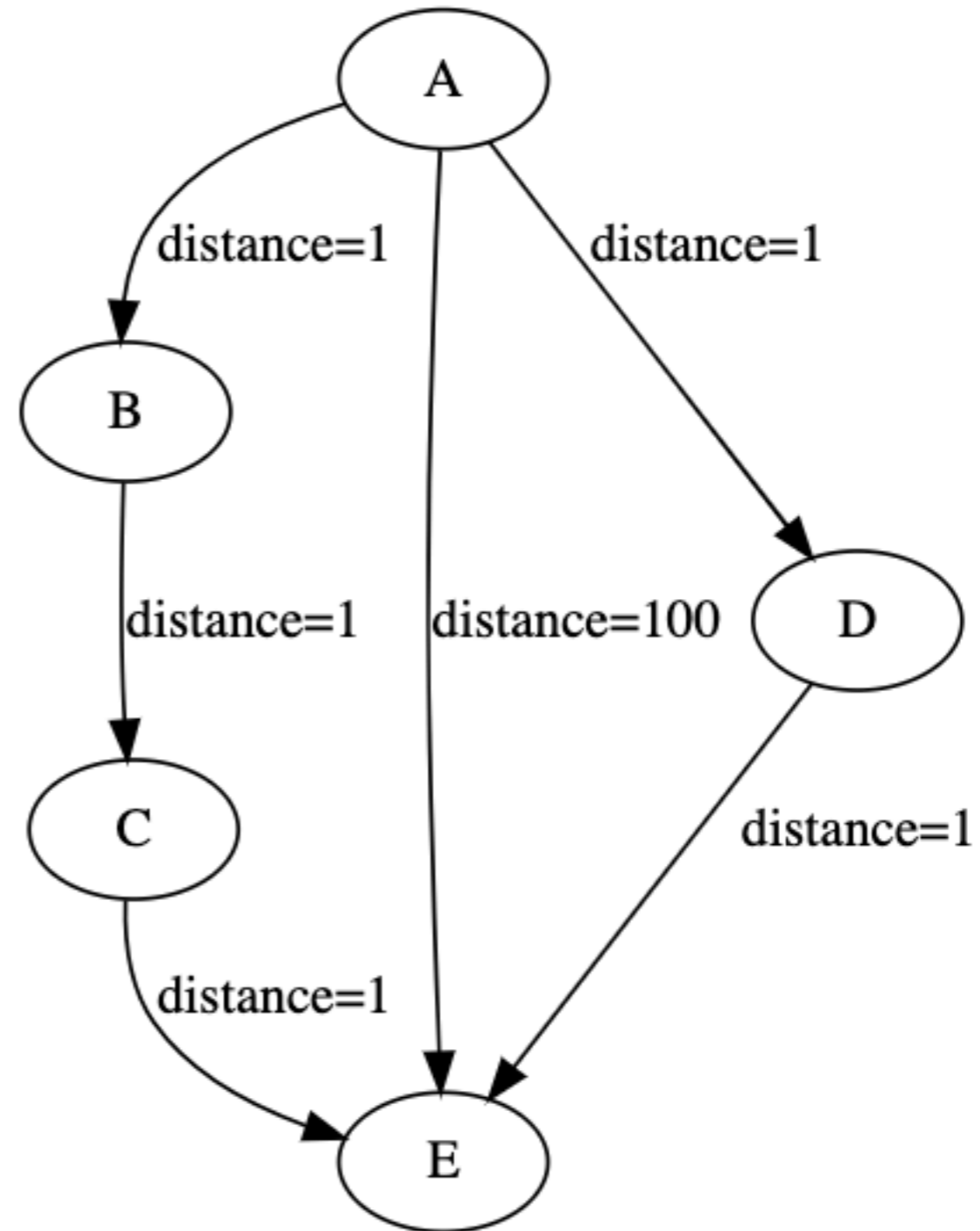
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Shortest Weighted Path

What path will DFS choose?

What path will BFS choose?

What path would you choose?



Work queues ("to do" list)

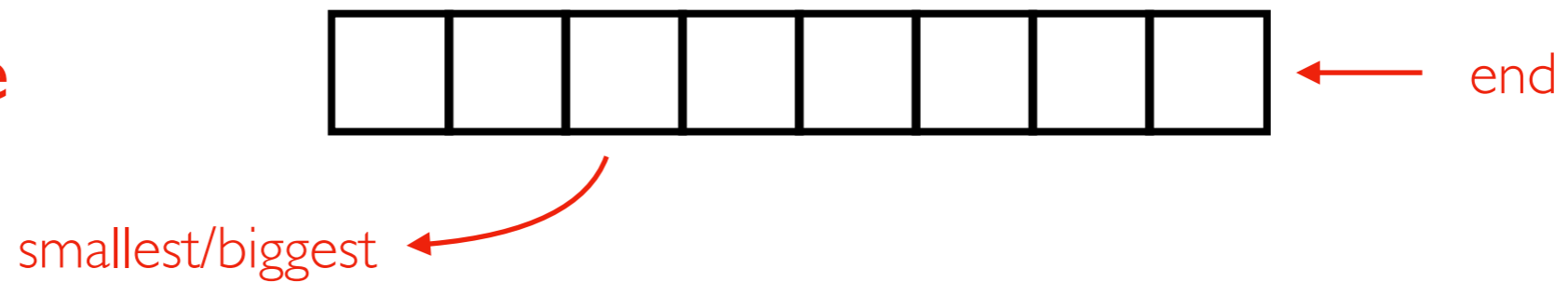
Stack
(FILO)



Queue
(FIFO)



Priority Queue

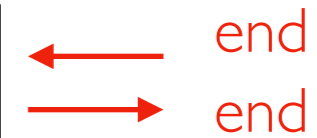


Work queues ("to do" list)

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)
```

what operations are slow?

Work queues ("to do" list)

Stack
(FILO)



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

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

Queue
(FIFO)

front ←



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Priority Queue

smallest/biggest ←



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