

Executing method calls

a0

v a0

v.num('e')

name Fred String

Employee

/** = no. times c occurs in name. */

```
num(char c) {
```

```
  1: int s= 0;
```

```
  // inv: s = number of c's in s[0..k-1]
```

```
  2: for (int k= 0; k < name.length(); k= k+1) {
```

```
    3: if (name.charAt(k) == c)
```

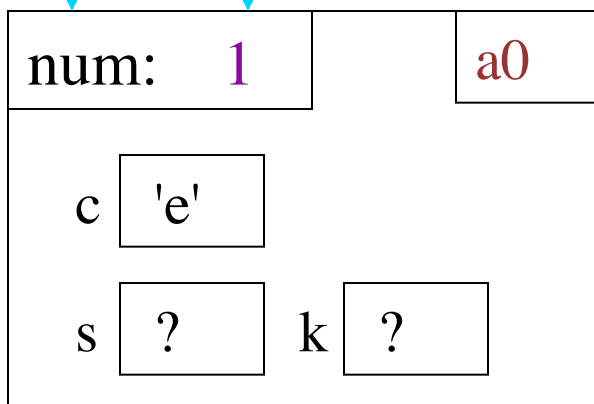
```
      4: s= s + 1;
```

```
  }
```

```
  5: return s;
```

method
name

program
counter



scope box: where
method is located:
object name or
file drawer (class)
name

parameters

local variables

frame for the call

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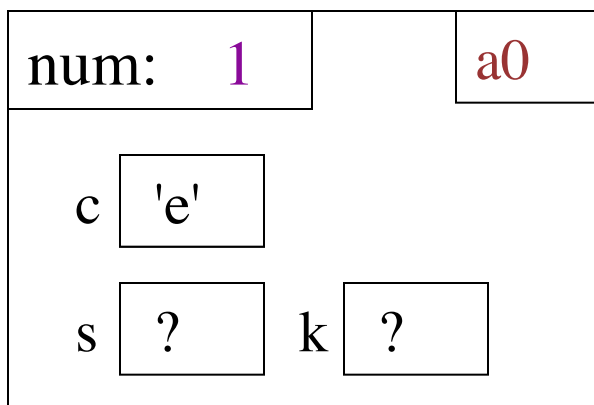
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    3: if (name.charAt(k) == c)
```

```
      4: s= s + 1;
```

```
  }
```

```
  5: return s;
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```
}
```



Memorize!!!!

1. Draw frame
2. Assign args to pars
3. Execute body
4. Erase frame

frame for the call