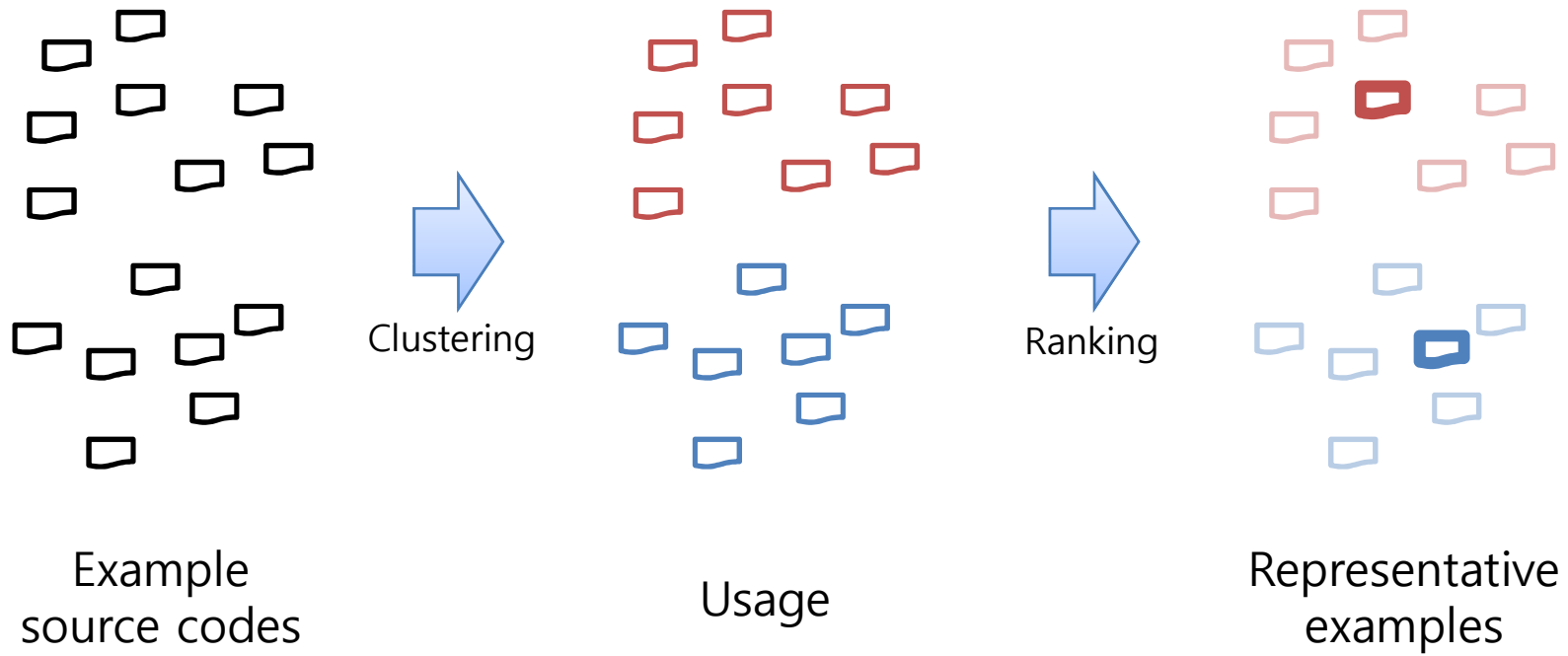


Lightning talk:
Taking representative examples

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POSTECH

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The way eXoa takes the representative examples



Learning HMM

C_1

```
{
String original[] = null;
String element = null;

ArrayList list = new ArrayList();
for (int i = 0; i < original.length; i++) {
    if (original[i].equals(element)) {
        list.add(original[i]);
    }
}
}
```

C_2

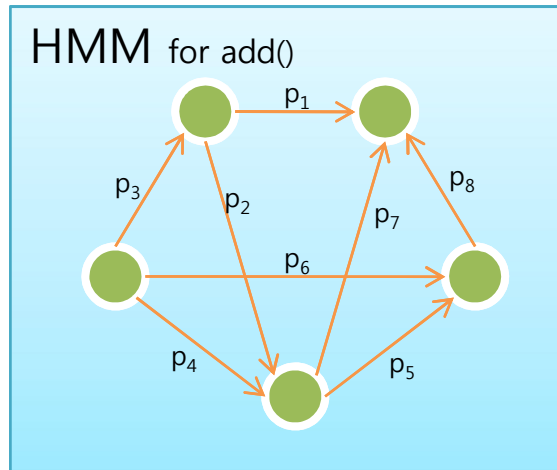
```
{
String name;
ArrayList acc = new ArrayList(headers.size());
for (Iterator i = headers.iterator(); i.hasNext(); ) {
    InternetHeader header =
        (InternetHeader) i.next();
    if (header.getName().equals(name) &&
        header.getValue() != null) {
        acc.add(header.getValue());
    }
}
}
```

C_3

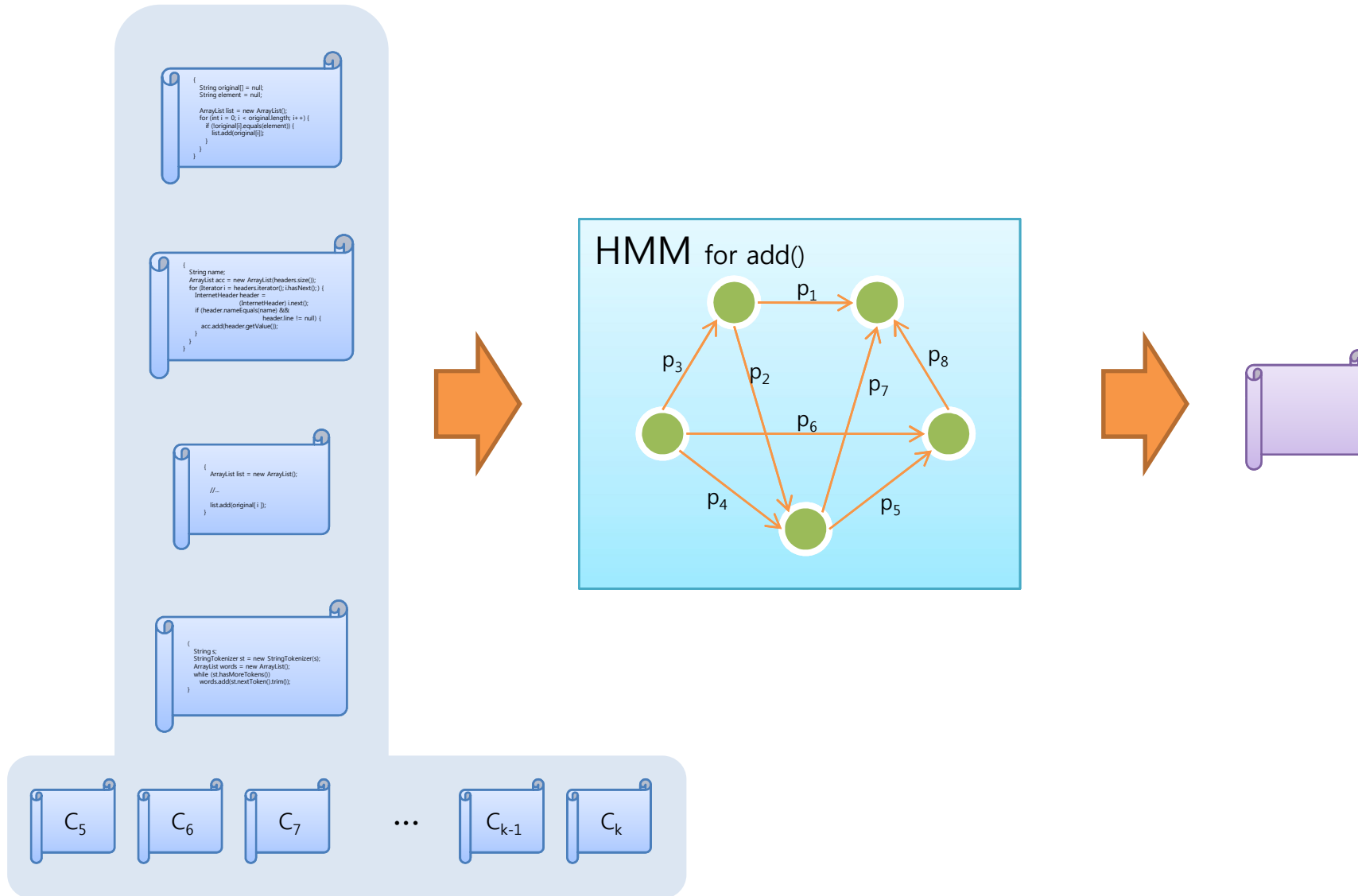
```
{
ArrayList list = new ArrayList();
//...
list.add(original[i]);
}
```

C_4

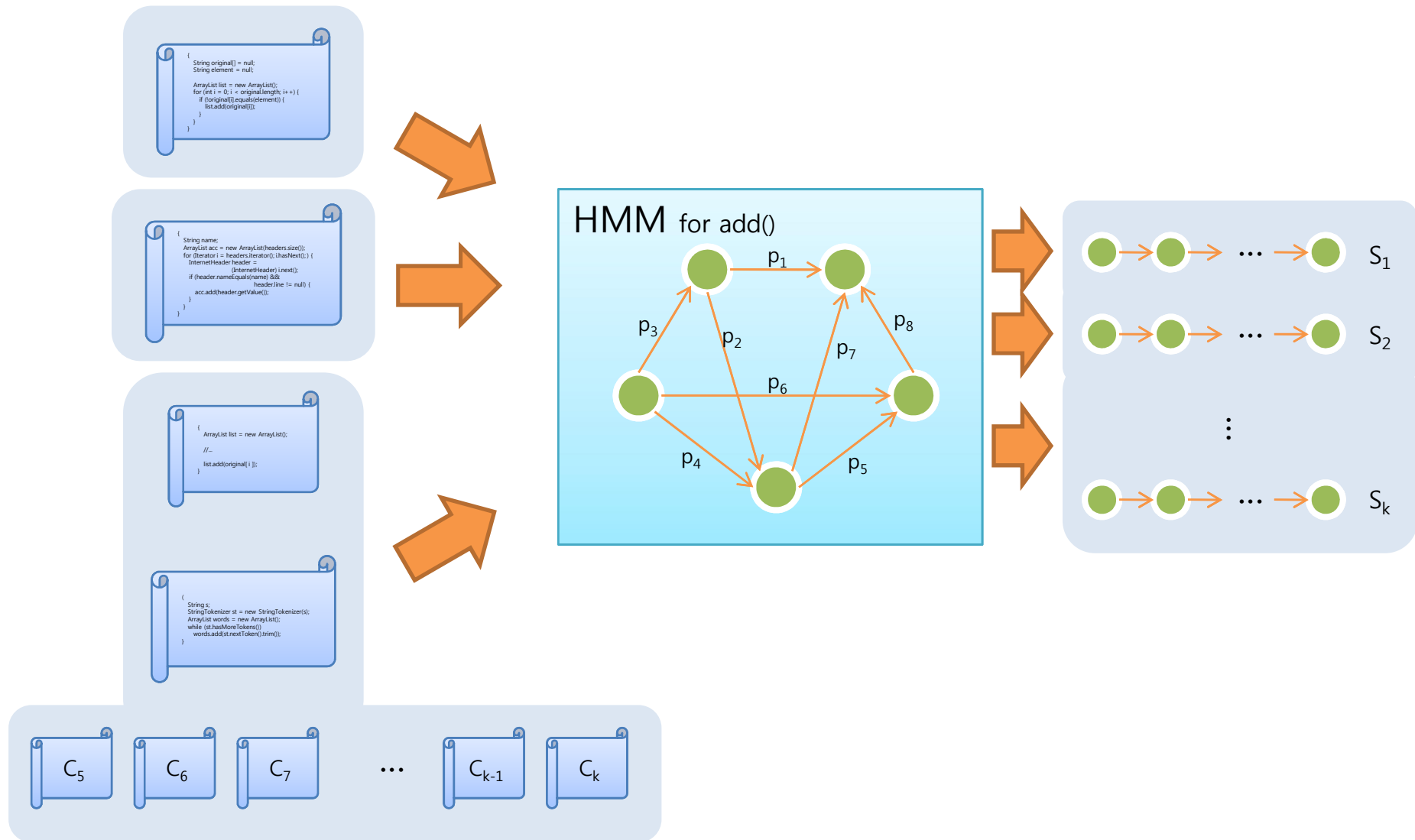
```
{
String s;
StringTokenizer st = new StringTokenizer(s);
ArrayList words = new ArrayList();
while (st.hasMoreTokens())
    words.add(st.nextToken().trim());
}
```



Finding the most probable example



Finding the representative examples in each usage



Finding the representative examples in each usage

```

{
String original[] = null;
String element = null;

ArrayList list = new ArrayList();
for (int i = 0; i < original.length; i++) {
    if (original[i].equals(element)) {
        list.add(original[i]);
    }
}
}
    
```

```

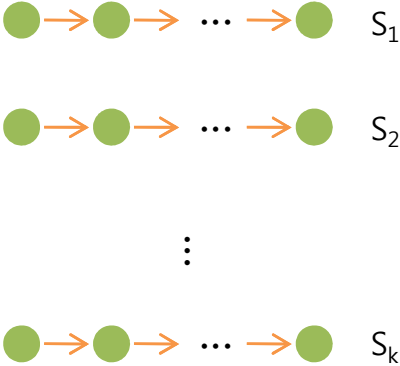
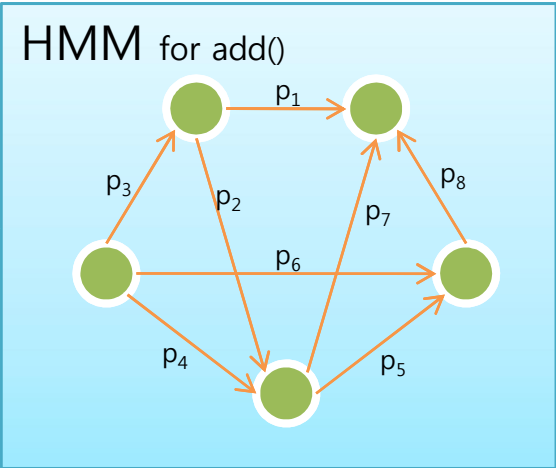
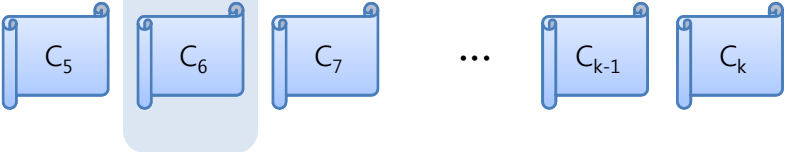
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ArrayList acc = new ArrayList(headers.size());
for (Iterator i = headers.iterator(); i.hasNext(); ) {
    InternetHeader header =
        (InternetHeader) i.next();
    if (header.getName().equals(name) &&
        header.getValue() != null) {
        acc.add(header.getValue());
    }
}
}
    
```

```

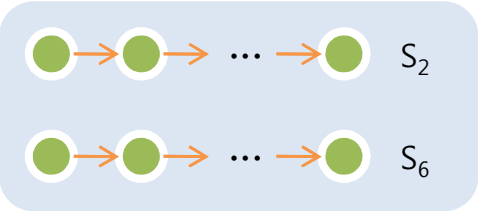
{
ArrayList list = new ArrayList();
//...
list.add(original[i]);
}
    
```

```

{
String s;
StringTokenizer st = new StringTokenizer(s);
ArrayList words = new ArrayList();
while (st.hasMoreTokens())
    words.add(st.nextToken().trim());
}
    
```



Eliminate similar sequences



Graphical models

- HMM
- Pseudo-2D HMM
- 2D Conditional Random Fields Model
- Hierarchical Markov Random Field Model
- Bayes(ian) (Belief) Networks
- ...

Q & A

Thank you for listening ...