



*U.S President Barack Obama's wife  
Michelle Obama honored all mothers on  
Mother's Day and offered her thoughts...*

## 0. Data Preprocessing

Sentence	POS	NER
[U.S,President,Barack, Obama,'s,wife,Michelle,Obam a...]	[NNP,NNP,NNP,NNP,POS,NN,NNP, NNP...]	[LOC,O,PERSON,PERSON,O,O, PERSON,PERSON...]

## 1. Feature Extraction

### Mentions

Mention	Type
U.S	LOC
Barack Obama	PERSON
Michelle Obama	PERSON

### CandidateRelations

Subject	Object	has_spouse
Barack Obama	Michelle Obama	

### Features

Subject	Object	feature
Barack Obama	Michelle Obama	's wife

## 2. Writing Inference Rule

```
inference_rule_1:{  
  input_query: ""  
  SELECT CandidateRelations.has_spouse, Features.feature  
  FROM   CandidateRelations, Features  
  WHERE  CandidateRelations.Subject=Features.Subject  
         AND CandidateRelations.Object=Features.Object""  
  function: "IsTrue(CandidateRelations.has_spouse)"  
  weight: "? (Features.feature)"  
}
```