b)

|  |  |  |  |
| --- | --- | --- | --- |
| **Stack** | **Buffer** | **New Dependedncy** | **Transition** |
| ROOT | I parsed this sentence correctly | - | Init |
| ROOT I | Parsed this sentence correctly | - | Shift |
| ROOT I parsed | This sentence correctly | - | Shift |
| ROOT I parsed this | Sentence correctly | - | Shift |
| ROOT I parsed this sentence | Correctly | - | Shift |
| ROOT I parsed sentence | Correctly | Sentence 🡪this | Left-arc |
| ROOT I parsed | correctly | Parsed 🡪 sentence | Right-arc |
| ROOT parsed | correctly | Parsed 🡪 I | Left-arc |
| ROOT parsed correctly | - | - | Shift |
| ROOT parsed | - | Parsed 🡪correctly | Right-arc |
| ROOT | - | ROOT 🡪parsed | Right-arc |

c) A sentence containing n words will be parsed in n^3 steps in the worst case.

g) Best UAS on dev set: 88.63

Best UAS on test set: 89.29