



Ahsanullah University of Science and Technology

Department of Computer Science and Engineering (CSE)

CSE4108: Artificial Intelligence Lab, Spring 2018

Lab Group: B2 Offline: 2 Topic: Intermediate Prolog

Task 1. Do the assignment-1 again, but this time in a different way.

- Instead of just writing the terms and syntax as mere rules and facts, write them as a context-free grammar using recursions, lists etc. as shown in the class.
- Instead of having two *isvalidsyntax* functors with different arity, write only one with arity 1. This time, the argument will be a list.

```
? – isValidSentence([Thanos,destroy,"TonyStark"]).
                                     false
? – isValidSentence(["CaptainAmerica",wields,shield]).
                                     true
? – isValidSentence([Thanos,is,from,Titan]).
                                     true
? – isValidSentence([Titan,is,from,Thanos]).
                                     false
? – isValidSentence([Nebula,will,fight,Thanos,vigorously]).
                                     true
? – isValidSentence([Nebula,will,fighting,Thanos,vigorously]).
                                     false
```

Task 2. Do the task-1 again, but this time in a different way. Instead of context free grammar, apply a definite clause grammar instead.