COMSATS University Islamabad, Wah Campus

Lab Assignment 4

Department of: <u>COMPUTER SCIENCE</u>

Class/Program: <u>BS(7-A,C,E)</u>   **Due Date:** <u>23 June 2022 16:00</u>

Subject: <u>Compiler Construction</u>   **Instructor:** <u>Muhammad Nadeem</u>

Q1. consider the following SDT.

$S \rightarrow$ NP VP

NP $\rightarrow$ Det N   {print("NP value");

VP $\rightarrow$ V NP   { print(" V and NP with VP"}

V $\rightarrow$ includes   { V.val = "includes"}

Det $\rightarrow$ the   {Det.val = "the"}

Det $\rightarrow$ a   { Det.val = "a"}

N $\rightarrow$ meal   {print ("Mean N")}

N $\rightarrow$ flight   {N.val = "flight"}

You need to write a program in python using your favorite parser, which parse above SDT. Input MUST be taken from file "input.txt". Rest of things can either be read from file are hard coded in source code.