

LAB Assignment-2

Q 3. Write a program to perform following operations on stack.

- a) Create functions for push and pop operations of stack.
- b) Write a function to convert an infix expression to postfix expression. Pass a one dimensional character array P to the function as input (infix exp) and return character array Q (postfix exp). Test your program for following input

P : (A – (B / C) * D + E) * F % G

- c) Write a function for the evaluation of a given postfix expression. For testing pass the postfix expression Q of part b and supply following set of values.

A = 90, B = 50, C = 2, D = 3, E = 1, F = 2, G = 5

Q 4. a) Write program using functions to implement Mergesort.

- b) Write two different (recursive and non-recursive) functions to implement quick sort.
- c) Write two different (recursive and non-recursive) functions to solve towers of Hanoi.