

DEPARTMENT OF INFORMATION TECHNOLOGY
DATA STRUCTURE LAB
BATCH- HX

Assignment 4

Due date: 23rd August, 2016

1. Write a C Program to implement Circular-Queue.
2. Write a program to implement a queue using two stacks.
3. Write a program to implement priority scheduling scheme using queue. In priority scheduling higher priority elements selected first.
4. Suppose we have two queues, P and Q, and one stack S. We are only allowed to dequeue from P and allowed to enqueue into the Q. We can do push and pop from the stack. In this program you will be given a permutation of n numbers and asked to check if it is a stack permutation or not.
[*Stack permutation*: A stack permutation is a ordering of numbers from 1 to n that can be obtained from the initial ordering 1, 2, ... n by a sequence of stack operations.]