Assignment 5 (CST-102)

1. Write a C program to do the following:
   (a) Execute a loop five times. In each iteration of the loop create a message queue, print the queue identifier and then delete the queue.
   (b) Now execute another loop five time. In each iteration of the loop create a message queue with a key of IPC_PRIVATE, print the queue identifier and place a message in the message queue.

2. After the program in 1 terminates look at the message queues using ipcs command. Study what is happening with the queue identifiers?

3. Write a C program "send" that creates a message queue "/tmp/1234" and then places a message in the message queue of size n and type 100. Now write a program "recv" that opens this message queue and reads the message from the queue and prints the size and type of the message on the screen. Run "send" twice to place two messages of size 1 and 2 in the queue. Now run "recv" twice to read the messages from the message queue.

   Note the order in which messages have been read and printed on the screen?

4. Modify program "send" and "recv" written in Q3 such that when recv reads the messages from the message queue, it first gets the second message and then gets the first message.