**Assignment VII**

Implement a program for producer consumer problem: A producer process produces information that is consumed by a consumer process. The problem describes two processes, the producer and the consumer, who share a common, fixed-size buffer. The producer's job is to generate data (A to Z) and put it into the buffer and start again. At the same time the consumer is consuming the data (i.e. removing it from the buffer) one piece at a time.

1. Create a semaphore.

2. Create a shared buffer

3. Initialize value of the semaphore to 1.

4. Create a child process.

5. Child process (Producer) writes to the buffer.

6. Producer performs an up operation on the semaphore for the consumer to consume.

7. Parent process (Consumer) performs a down operation on the semaphore and reads or

consumes the data from the buffer (Print A …Z)

8. Consumer then performs an up operation.