Practical 4

AIM: Write a program that implements FCFS scheduling algorithm.

CODE:

import java.util.Vector;

class Producer extends Thread {

// initialization of queue size

static final int MAX = 7;

private Vector messages = new Vector();

@Override

public void run() {

try {

while (true) {

putMessage();

sleep(1000);

}

} catch (InterruptedException e) {

}

}

private synchronized void putMessage()

throws InterruptedException {

while (messages.size() == MAX)

wait();

messages.addElement(new java.util.Date().toString());

notify();

}

public synchronized String getMessage()

throws InterruptedException {

notify();

while (messages.size() == 0)

wait();

String message = (String) messages.firstElement();

messages.removeElement(message);

return message;

}

}

class Consumer extends Thread {

Producer producer;

Consumer(Producer p) {

producer = p;

}

@Override

public void run() {

try {

while (true) {

String message = producer.getMessage();

System.out.println("Got message: " + message);

sleep(2000);

}

} catch (InterruptedException e) {

}

}

public static void main(String args[]) {

Producer producer = new Producer();

producer.start();

new Consumer(producer).start();

}

}

OUTPUT:

