

Report

Answer to Question 1 - Yes the program did produce garbage sometimes. This might be because there is no synchronization between the process and consequently the value of n could be mishandled by those process. The producer or consumer could go ahead of each other and there is no telling if they are accessing the value of n as it is updated sequentially. Accessing value at a wrong time may lead to corruption of the value and thus producing garbage. No synchronization around the value of n causes garbage values.

Answer to Question 2 - No, All the produced values are not being consumed. Most of the time only the highest value, i.e. the value of count is consumed and this is because producer is way ahead and finished updating the value of n and consumer consumes the last updated value, and prints it count times. Also, since the *printf* call takes some time to execute in order to deal with various I/O, all this while producer runs through the entire loop and so most of the time the values printed out will be the count value.