2> Shared Memory

↳ A particular region of memory is shared between cooperating process

↳ Cooperating process can exchange information by reading and writing data to this shared region

↳ It's fastest than memory passing as kernel is required only once that is setting up a shared memory. After that kernal assistance is not required

↳ Shared memory is a memory shared between all processes by two or more processes established using shared memory.

↳ This type of memory should protect each other by synchronizing access between all processes

Shared memory is important for these reason

↳ It is a way of passing data between processes

↳ Shared memory is mush fastes than these methods and is also more reliable.

↳ Shared memory allows two or more processes to share the same copy of the data

Shared memory method example

ex Producer. Consumer method

↳ There are two process: producer and Consumer. the produces produces some item and Consumer Consume that item.

↳ The two processes share a common space or memory location known as buffer

↳ where the item produced by the producer is stored and from which the Consumer Consume the item if needed

There are two version of this problem the first one is ~~one~~ is known as unbounded buffer problem in which the product can keep on producing item and there is no limit on the size of the buffer.

↳ the second one is known as bounded buffer problem in which the producer can produce up to a certain number of item before it starts waiting for Consumer to Consume it.