**Assignment 2 | 18th July 2021**

## Question 1

1. Define the following cache strategies:

a) Cache Aside - The cache sits on the side and the application directly talks to both the cache and the database.

b) Read Through - Read-through cache sits in-line with the database. When there is a cache miss, it loads missing data from database, populates the cache and returns it to the application.

c) Write Through - data is first written to the cache and then to the database

d) Write behind - the application writes data to the cache which acknowledges immediately and after some delay, it writes the data back to the database.

**Question 2**

Explain Message Queues and PUB- SUB Queues. Mention where they are used.

Message Queue - A message within the queue will be deleted once consumed

PUB-SUB Queue - publishers that produce ("publish") messages in different categories and subscribers who consume published messages from various categories they are subscribed to.