Messaging and Integration quiz *

- SQS scales automatically.
- SQS Visibility Timeout is a period of time during which Amazon SQS prevents other consumers from receiving and processing the message again. In visibility timeout, a message is hidden only after it is consumed from the queue. Increasing the visibility timeout gives more time to the consumer to process the message and prevent duplicates reading of the message.
- SQS FIFO Queue: Messages to be processed exactly once and in order (No duplicates).
- SNS + SQS Fan Out pattern: Send only one message to the SNS Topic and then "fan-out" to multiple SQS queues. It is fully decoupled, no data loss, ability to add more SQS queues (more applications) over time.
- The capacity limits of a Kinesis data stream are defined by the no. of shards within the data stream. The limits can be

exceeded by either data throughput or the no of reading data cells. Each shard allows for 1MB/s incoming data and 2MB/s outgoing data. You should increase the no of shards within your data stream to provide enough capacity.
- Kinesis Data Stream uses the partition key associated with each data record to determine which shard a given data record belongs to.
- Kinesis Data Streams + Kinesis Data Firehose : loading real time data into S3 and Redshift.
Kinesis Data Firehose supports custom data transformations using AWS Lambda.
- Subscriber of AWS SNS: Amazon SQS, HTTP(s) endpoint, AWS Lambda, Kinesis Data Firehose.
- Email notifications to users: Amazon SNS.
- Amazon MQ supports industry-standard APIs such as JMS and NMS, and protocols for messaging including AMQP, STOMP, MQTT and Websocket.
- Make Aurora available to lot of transactions : Use SQS as a buffer to write to Aurora.
- Unpredictable traffic for Kinesis Data Stream we On-demand mode.