1. Assign the message to “random partition” based on round robin policy
   1. [**ProducerRecord**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html#ProducerRecord(java.lang.String,%20V))([**String**](http://docs.oracle.com/javase/7/docs/api/java/lang/String.html?is-external=true) topic, [**V**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html) value)
2. Assign the message to “partition based on hash key”.
   1. [**ProducerRecord**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html#ProducerRecord(java.lang.String,%20K,%20V))([**String**](http://docs.oracle.com/javase/7/docs/api/java/lang/String.html?is-external=true) topic, [**K**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html) key, [**V**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html) value)

hash key is evaluated based on formula. Ex: If key is String, then

partition assigned = hash(key)%number of partition in Topic.

Ex: If 6 partition (0 to 5) is present. Then 1 partition is selected based on above formula.

1. Assign the message to “specific partition” by specific partition number. Note: Partition Number is a Number and not String.
   1. [**ProducerRecord**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html#ProducerRecord(java.lang.String,%20java.lang.Integer,%20java.lang.Long,%20K,%20V))([**String**](http://docs.oracle.com/javase/7/docs/api/java/lang/String.html?is-external=true) topic, [**Integer**](http://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html?is-external=true) partition, [**Long**](http://docs.oracle.com/javase/7/docs/api/java/lang/Long.html?is-external=true) timestamp, [**K**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html) key, [**V**](https://kafka.apache.org/0102/javadoc/org/apache/kafka/clients/producer/ProducerRecord.html) value)