**JAVA 8 STREAMS API:**

1. **average()** api only used on the integers
2. **findFirst()** api is used to retrive the first element from the list **/ findAny()** it takes any one value from the list or streams
3. **anyMatch(condition) / allMatch(condition) / noneMatch(condition)**
4. **skip(total\_number)** it will skip that elements and then it will proceeds the operation
5. **distinct()** it will give only the original value**.**
6. **count()** it will tell us the exactly the total number of elements available
7. **Map<Key,Value> obj= object(list).stream().collect(Collectors.partitioningBy(condition like filterate it uses predicate method inside));**
8. **takeWhile (conditions) it will be act as the filter method but once condition meets false it will automatically stops proceedings**
9. **dropWhile(conditions) drop all items if the condition applied to them is true and as soon as it hits false it will return the remaining elements**

**Syantax for grouping\_by and mapping:**

**Map<String,List<String>> obj =books.collect(Collectors.groupingBy(Book::getAuthor,Collectors.mapping(Book::getTile,Collectors.toList()));**

This operation return us the the author name has the key and list of the Book Titles

For optional we can use the following API’S in it :

**Optional.ofNullable();**

1. **isPresent() / ifPresent(any condition)**
2. **orElse(**any method or default value**) / orElseGet(**any method only(()->methodname()) **) / orElseThrow(** any exception or custom exceptions (Exception::new)**)**
3. **Get() it is used to get the entity object in return .**