```java
public static int str2Int(String str) {
        if (str == null || str.isEmpty()) {
            throw new IllegalArgumentException("Input argument can't be null or empty"
        }
        int sum  = 0;
        for(int i = 0; i < str.length(); i++) {
            if(str.charAt(i) > '9' || str.charAt(i) < '0') {
                throw new IllegalArgumentException(str.charAt(i) +
                " is not a valid input character");
            }
            sum = sum * 10 + str.charAt(i) - '0';
        }
        return sum + 1;
    }
```