3. Write a **Spark program using Python**, to count the number of lines and number of characters of each word in a given paragraph.

from pyspark import SparkContext

sc = SparkContext("local", "CharacterAndLineCount")

input\_text = """This is an example input text.

This is the second line.

And this is the third line."""

text\_rdd = sc.parallelize(input\_text.split("\n"))

line\_count = text\_rdd.count()

print(f"Number of lines in the text: {line\_count}")

word\_char\_count\_rdd = text\_rdd.flatMap(lambda line: line.split()).map(lambda word: (word, len(word)))

word\_char\_count\_result = word\_char\_count\_rdd.collect()

print("Word and Character Count:")

for word, count in word\_char\_count\_result:

    print(f"Word: {word}, Character Count: {count}")

sc.stop()