**Working Test Cases**

**TestCase 01:**

gene1= “ATGCT”

gene2 =”AGCT”

match=1

mismatch=-1

gap=-2

Output: ATGCT

A\_GCT

MinimumPenalty=2

**TestCase 02:**

gene1 = "GAGC"

gene2 = “GATC”

match=1

mismatch=-1

gap=-2

Output: GAGC

GATC

MinimumPenalty=2

**TestCase 03:**

gene1 = "ATCAGAGTC"

gene2 = “TTCAGTC”

match=2

mismatch=0

gap=-2

Output:

ATCAGAGTC

TTC\_\_AGTC

MinimumPenalty=8

**TestCase 04:**

gene1 = "ATCG

gene2 = “ATG”

match=5

mismatch=-4

gap=-1

Output:

ATCG

AT\_G

MinimumPenalty=14