**Name: Bharath A**

**USN: ENG19CS0063**

5a)

if k in data1:

v1 = data1[k]

if v1 != v2:

dupKeys[k] = [v1, v2]

del data1[k]

else:

data1[k] = v2

return dupKeys

5b)

def uniqueUpdate(data1, data2):

# Initially empty dictionary

dupKeys = {}

# Examine every (k, v2) pair in data2

for [k, v2] in data2:

# Check if there is a key-value

# pair with key = k in data1

if k in data1:

v1 = data1[k]

# (k, v1) in dict1

# Check if v1 != v2

if v1 != v2:

# Add (k, [v1, v2])

# to dictionary

dupKeys[k] = [v1, v2]

# Remove (k, v1) from data1

del data1[k]

else:

# Add (k, v2) to data1

data1[k] = v2

# After processing all (k, v2) in

# data2, return the dictionary

return dupKeys

5c)

test case1:

4

1 2

3 3

3 8

4 9

2

3 3

4 4

test case 2:

4

1 2

2 2

3 3

4 19

2

3 3

4 19

test case 3:

the test case written in 5a,which breaks the initially written code can be written.