

First set of corrupted triples
second set of corrupted triples
third set of corrupted triples
fourth set of corrupted triples

c1 Triple1_corrupted_L1
c2 Triple2_corrupted_L1
c3: Triple1_corrupted_L1
c4:Triple2_corrupted_L1
c5:Triple1_corrupted_L1
c6:Triple2_corrupted_L1
c7:Triple1_corrupted_L1
c8:Triple2_corrupted_L1

One batch size

reshape(batch_size, neg_ratio)

C1: Triple1_L1	C2: Triple2_L1	C3: Triple1_L1	C4: Triple2_L1
C5: Triple1_L1	C6: Triple2_L1	C7: Triple1_L1	C8: Triple2_L1

Figure (b)

TT.Sum along dimension 1

C1 + C2 + C3 + C4
C5 + C6 + C7 + C8

Figure (c)

Batch_size = 2, neg_ratio = 4

Figure (a)