

**Answer to question 1:**

Flower: Doc 1, Doc 5

Sale : Doc 1, Doc 3

Hangzhou: Doc 1, Doc 2,

Bike: Doc 2, Doc 3, Doc 4, Doc 6

Factory: Doc 2,

Construction: Doc 2,

Kunming: Doc 3, Doc 4, Doc 6

Drive: Doc 4

Guangzhou: Doc 5

International: Doc 5

Festival: Doc 5

Sell : Doc 6

**Answer to question 2:**

Flower: Doc 1(word 1), Doc 5(word 1)

Sale : Doc 1(word 3), Doc 3(word 1)

Hangzhou: Doc 1(word 5), Doc 2(word 1)

Bike: Doc 2(word 2), Doc 3(word 4), Doc 4(word 3), Doc 6(word 2)

Factory: Doc 2(word 3),

Construction: Doc 2(word 5),

Kunming: Doc 3(word 6), Doc 4(word 5), Doc 6(word 6)

Drive: Doc 4(word 1)

Guangzhou: Doc 5(word 3)

International: Doc 5(word 4)

Festival: Doc 5(word 5)

Sell : Doc 6(word 4)

**Answer to question 3:**

The result is Doc 2.

Bike is indexed "Doc 2, Doc 3, Doc 4, Doc 6", and Kunming is indexed " Doc 3, Doc 4, Doc 6".

Therefore, "bike not Kunming" is meant to search for which document with bike but without

Kunming ,so swipe Doc 3, Doc 4 and Doc 6 out of the list "Doc 2, Doc 3, Doc 4, Doc 6". So the result is Doc 2.

**Answer to question 4:**

The result is Doc 3 and Doc 4.

First, find the answer to "bike AND Kunming", the answer is Doc 3, 4, 6. Then, ""bike in Kunming"" is meant to search for which document with the whole "bike in Kunming". "bike in Kunming" means that the word place distance in the same document between bike and Kunming is 2 words. Then, bike is "Doc 3(word 4), Doc 4(word 3), Doc 6(word 2)", and Kunming is "Doc 3(word 6), Doc 4(word 5), Doc 6(word 6)". So the result is Doc 3 and Doc 4.

**Answer to question 5:**

madam\$, adam\$m, dam\$ma, am\$mad, m\$mada, \$madam

**Answer to question 6:**

There is 8 letters in "training"; and there are 10 letters in "restrainer". Therefore, the edit distance between "training" and "restrainer" is 2.

**Answer to question 7:**

\$f, fo, oo, ot, tb, ba, al, ll, l\$