CODE FUZZY SEARCH (MYSQL):

CREATE DEFINER=`root`@`localhost` FUNCTION `levenshtein`( s1 VARCHAR(255), s2 VARCHAR(255) ) RETURNS int

DETERMINISTIC

BEGIN

DECLARE s1\_len, s2\_len, i, j, c, c\_temp, cost INT;

DECLARE s1\_char CHAR;

-- max strlen=255

DECLARE cv0, cv1 VARBINARY(256);

SET s1\_len = CHAR\_LENGTH(s1), s2\_len = CHAR\_LENGTH(s2), cv1 = 0x00, j = 1, i = 1, c = 0;

IF s1 = s2 THEN

RETURN 0;

ELSEIF s1\_len = 0 THEN

RETURN s2\_len;

ELSEIF s2\_len = 0 THEN

RETURN s1\_len;

ELSE

WHILE j <= s2\_len DO

SET cv1 = CONCAT(cv1, UNHEX(HEX(j))), j = j + 1;

END WHILE;

WHILE i <= s1\_len DO

SET s1\_char = SUBSTRING(s1, i, 1), c = i, cv0 = UNHEX(HEX(i)), j = 1;

WHILE j <= s2\_len DO

SET c = c + 1;

IF s1\_char = SUBSTRING(s2, j, 1) THEN

SET cost = 0; ELSE SET cost = 1;

END IF;

SET c\_temp = CONV(HEX(SUBSTRING(cv1, j, 1)), 16, 10) + cost;

IF c > c\_temp THEN SET c = c\_temp; END IF;

SET c\_temp = CONV(HEX(SUBSTRING(cv1, j+1, 1)), 16, 10) + 1;

IF c > c\_temp THEN

SET c = c\_temp;

END IF;

SET cv0 = CONCAT(cv0, UNHEX(HEX(c))), j = j + 1;

END WHILE;

SET cv1 = cv0, i = i + 1;

END WHILE;

END IF;

RETURN c;

END

select \* from world.us\_accidents where levenshtein(AIRPORT\_CODE,'KEUG') <= 1 limit 10; -- pacific