Inverted file structure

Database indexing

y

coarse
quantizer q_c

$q_c(y)$

compute
residual

$r(y)$

product
quantizer q_p

$q_p(r(y))$

i

inverted list $\mathcal{L}_i$

list entry

| id | code |

append
to inverted list

Query processing

compute
residual

$r(x)$

$w\times$

$q_c(x)$

coarse
quantizer

x

compute
$d(r(x), q_p(r(y)))$

select k
smallest distances

Search result