According to the dataset of **RELEVANCE\_SCORE** created in assignment 2. I marked 10 relevant files of query: graduate program mathematics

Math

TravisTaylor

1927

SIAM

MotokiWu

SamSampson

Society\_for\_Industrial\_and\_Applied\_Mathematics

MichaelTehranian

Evelyn\_Silvia

Mathematics\_ArXiv\_front

The rank of these files in the initial search is: 2 7 30 33 36 39 40 56 97 122

2 of them appear in top10 results

As a result, here comes the *precision-recall curve* (assume the total number of relevant documents in the corpus to be 100)

And the *precision at 10* is 0.2

I chose the 2 files in top10 as relevance feedback, and the rank of 10 files is: 2 7 27 32 33 34 40 51 99 119

the *precision-recall curve :*

And the *precision at 10* is 0.2

Chose the same files as feed back again, the rank: 0 5 25 29 32 38 41 56 131 182

Curve:

And the *precision at 10* is still 0.2

We can see the result improved in general after the first time feedback.

After the second time feedback, the top rank improved, but the low rank didn’t