* This model is called as BIR (*Binary Independence retrieval*)
* It uses *Probabilistic* framework
* Given a user query, there is an ideal set calculated in the beginning. The calculation is a *guess* ofinitial description of an ideal answer set.
* User (user system maybe) look retrieved documents are either relevant or non-relevant (*relevance feedback*). If they are non-relevant, the system goes for an iterative process to improve the result.
* Initial set of document retrieval is done using either of vector or Boolean model. User then inspects the documents looking for the relevant ones. IR then uses this information to refine description of ideal answer set.
* By repeating the process, it is expected that the description of ideal answer set will improve.
* Description of ideal answer set is modelled in probabilistic terms.
* Given a user query *q* and a document *dj,* the probabilistic model tries to estimate that the user will find the document *dj* relevant*.*
* The model assumes that this probability of relevance depends on the query and document representations only.
* Ideal answer set is referred to as *R* and should maximize the probability of relevance. Documents of set *R* are predicted to be relevant.

Advantages:

* Documents are ranked in decreasing order of their probability of relevant.
* Gives an accurate ranking if there is an exact match.

Limitations:

* Need to guess the initial separation of documents into relevant and irrelevant sets.
* All weights are binary.
* The adoption of independent assumptions for index terms.