```
Python 3.7.7 (default, Apr 15 2020, 05:09:04) [MSC v.1916 64 bit (AMD64)]
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IPython 7.13.0 -- An enhanced Interactive Python.

In [1]:        'E:/Desktop/IRS Practical-2/Main.py'      ='E:/Desktop/IRS Practical-2'

['movies', 'or', 'films', 'are', 'a', 'type', 'of', 'visual', 'communication', 'which',
'uses', 'moving', 'pictures', 'and', 'sound', 'to', 'tell', 'stories', 'or', 'teach',
'people', 'something', 'most', 'people', 'watch', 'view', 'movies', 'as', 'a', 'type',
'of', 'entertainment', 'or', 'a', 'way', 'to', 'have', 'fun', 'for', 'some', 'people',
'fun', 'movies', 'can', 'mean', 'movies', 'that', 'make', 'them', 'laugh', 'while', 'for',
'others', 'it', 'can', 'mean', 'movies', 'that', 'make', 'them', 'cry', 'or', 'feel']
['most', 'movies', 'are', 'made', 'so', 'that', 'they', 'can', 'be', 'shown', 'on',
'screen', 'in', 'cinemas', 'and', 'at', 'home', 'after', 'movies', 'are', 'shown', 'in',
'cinemas', 'for', 'a', 'period', 'of', 'a', 'few', 'weeks', 'or', 'months', 'they', 'may',
'be', 'marketed', 'through', 'several', 'other', 'medias', 'they', 'are', 'shown', 'on',
'pay', 'television', 'or', 'cable', 'television', 'and', 'sold', 'or', 'rented', 'on',
'dvd', 'disks', 'or', 'videocassette', 'tapes', 'so', 'that', 'people', 'can', 'watch',
'the', 'movies', 'at', 'home', 'you', 'can', 'also', 'download', 'or', 'stream', 'movies',
'older', 'movies', 'are', 'shown', 'on', 'television', 'broadcasting']
['a', 'movie', 'camera', 'or', 'video', 'camera', 'takes', 'pictures', 'very', 'quickly',
'usually', 'at', '24', 'or', '25', 'pictures', 'frames', 'every', 'second', 'when', 'a',
'movie', 'projector', 'a', 'computer', 'or', 'a', 'television', 'shows', 'the',
'pictures', 'at', 'that', 'rate', 'it', 'looks', 'like', 'the', 'things', 'shown', 'in',
'the', 'set', 'of', 'pictures', 'are', 'really', 'moving', 'sound', 'is', 'either',
'recorded', 'at', 'the', 'same', 'time', 'or', 'added', 'later']
['a', 'screenwriter', 'writes', 'a', 'script', 'which', 'is', 'the', 'story', 'of', 'the',
'movie', 'with', 'dialogue', 'and', 'things', 'that', 'the', 'actors', 'will', 'say',
'and', 'do', 'a', 'producer', 'hires', 'people', 'to', 'work', 'on', 'the', 'movie',
'and', 'gets', 'all', 'of', 'the', 'money', 'that', 'will', 'be', 'needed', 'to', 'pay',
'for', 'the', 'actors', 'and', 'the', 'equipment', 'producers', 'usually', 'get', 'the',
'money', 'by', 'borrowing', 'it', 'from', 'a', 'bank', 'or', 'by', 'getting', 'investors',
'to', 'lend', 'money', 'to', 'the', 'movie']
['actors', 'and', 'directors', 'read', 'scripts', 'to', 'find', 'out', 'what', 'to',
'say', 'and', 'what', 'to', 'do', 'the', 'actors', 'memorize', 'the', 'words', 'from',
'the', 'script', 'that', 'they', 'will', 'say', 'in', 'the', 'movie', 'and', 'learn',
'the', 'actions', 'that', 'the', 'script', 'tells', 'them', 'to', 'do', 'then', 'the',
'director', 'tells', 'the', 'actors', 'what', 'to', 'do', 'and', 'a', 'cameraman',
'takes', 'motion', 'pictures', 'of', 'them', 'with', 'a', 'motion', 'picture']
['the', 'bearer', 'cheque', 'is', 'a', 'type', 'of', 'cheque', 'in', 'which', 'the',
'bearer', 'is', 'authorised', 'to', 'get', 'the', 'cheque', 'encashed', 'this', 'means',
'the', 'person', 'who', 'carries', 'the', 'cheque', 'to', 'the', 'bank', 'has', 'the',
'authority', 'to', 'ask', 'the', 'bank', 'for', 'encashment', 'this', 'type', 'of',
'cheque', 'can', 'be', 'used', 'for', 'cash', 'withdrawal', 'this', 'kind', 'of',
'cheque', 'is', 'endorsable', 'no', 'kind', 'of', 'identification', 'is', 'required',
'for', 'the', 'bearer', 'of', 'the']
['this', 'type', 'of', 'cheque', 'cannot', 'be', 'endorsed', 'ie', 'only', 'the', 'payee',
'whose', 'name', 'has', 'been', 'mentioned', 'in', 'the', 'cheque', 'is', 'liable', 'to',
'get', 'cash', 'for', 'that', 'amount', 'the', 'drawer', 'needs', 'to', 'strike', 'the',
'or', 'bearer', 'mark', 'as', 'mentioned', 'on', 'the', 'cheque', 'so', 'that', 'the',
'cheque', 'can', 'only', 'be', 'encashed', 'to', 'the']
['in', 'this', 'type', 'of', 'cheque', 'no', 'cash', 'withdrawal', 'can', 'be', 'done',
'the', 'amount', 'can', 'only', 'be', 'transferred', 'from', 'the', 'drawers', 'account',
'to', 'the', 'payees', 'account', 'any', 'third', 'party', 'can', 'visit', 'the', 'bank',
```

'to', 'submit', 'the', 'cheque', 'in', 'case', 'of', 'a', 'crossed', 'cheque', 'the',
'drawer', 'must', 'draw', 'two', 'lines', 'at', 'the', 'left', 'top', 'corner', 'of',
'the']
['if', 'a', 'cheque', 'reaches', 'the', 'bank', 'in', 'a', 'torn', 'condition', 'it',
'is', 'called', 'a', 'mutilated', 'cheque', 'if', 'the', 'cheque', 'is', 'torn', 'into',
'two', 'or', 'more', 'pieces', 'and', 'the', 'relevant', 'information', 'is', 'torn',
'the', 'bank', 'shall', 'reject', 'the', 'cheque', 'and', 'declare', 'it', 'invalid',
'until', 'the', 'drawer', 'confirms', 'its', 'validation', 'if', 'the', 'cheque', 'is',
'torn', 'from', 'the', 'corners', 'and', 'all', 'the', 'important', 'data', 'on', 'the',
'cheque', 'is', 'intact', 'then', 'the', 'bank', 'may', 'process', 'the', 'cheque',
'further']
['when', 'a', 'cheque', 'only', 'has', 'a', 'drawers', 'signature', 'and', 'all', 'the',
'other', 'fields', 'are', 'left', 'empty', 'then', 'such', 'a', 'type', 'of', 'a',
'cheque', 'is', 'called', 'a', 'blank', 'cheque', 'the', 'above', 'mentioned', 'types',
'of', 'cheques', 'are', 'the', 'most', 'commonly', 'known', 'and', 'used', 'in', 'the',
'indian', 'banking']

Stop Word Removal

['movies', 'films', 'type', 'visual', 'communication', 'uses', 'moving', 'pictures',
'sound', 'tell', 'stories', 'teach', 'people', 'something', 'people', 'watch', 'view',
'movies', 'type', 'entertainment', 'way', 'fun', 'people', 'fun', 'movies', 'mean',
'movies', 'make', 'laugh', 'others', 'mean', 'movies', 'make', 'cry', 'feel']
['movies', 'made', 'shown', 'screen', 'cinemas', 'home', 'movies', 'shown', 'cinemas',
'period', 'weeks', 'months', 'may', 'marketed', 'several', 'medias', 'shown', 'pay',
'television', 'cable', 'television', 'sold', 'rented', 'dvd', 'disks', 'videocassette',
'tapes', 'people', 'watch', 'movies', 'home', 'also', 'download', 'stream', 'movies',
'older', 'movies', 'shown', 'television', 'broadcasting']
['movie', 'camera', 'video', 'camera', 'takes', 'pictures', 'quickly', 'usually', '24',
'25', 'pictures', 'frames', 'every', 'second', 'movie', 'projector', 'computer',
'television', 'shows', 'pictures', 'rate', 'looks', 'like', 'things', 'shown', 'set',
'pictures', 'really', 'moving', 'sound', 'either', 'recorded', 'time', 'added', 'later']
['screenwriter', 'writes', 'script', 'story', 'movie', 'dialogue', 'things', 'actors',
'say', 'producer', 'hires', 'people', 'work', 'movie', 'gets', 'money', 'needed', 'pay',
'actors', 'equipment', 'producers', 'usually', 'get', 'money', 'borrowing', 'bank',
'getting', 'investors', 'lend', 'money', 'movie']
['actors', 'directors', 'read', 'scripts', 'find', 'say', 'actors', 'memorize', 'words',
'script', 'say', 'movie', 'learn', 'actions', 'script', 'tells', 'director', 'tells',
'actors', 'cameraman', 'takes', 'motion', 'pictures', 'motion', 'picture']
['bearer', 'cheque', 'type', 'cheque', 'bearer', 'authorised', 'get', 'cheque',
'encashed', 'means', 'person', 'carries', 'cheque', 'bank', 'authority', 'ask', 'bank',
'encashment', 'type', 'cheque', 'used', 'cash', 'withdrawal', 'kind', 'cheque',
'endorsable', 'kind', 'identification', 'required', 'bearer']
['type', 'cheque', 'cannot', 'endorsed', 'ie', 'payee', 'whose', 'name', 'mentioned',
'cheque', 'liable', 'get', 'cash', 'amount', 'drawer', 'needs', 'strike', 'bearer',
'mark', 'mentioned', 'cheque', 'cheque', 'encashed']
['type', 'cheque', 'cash', 'withdrawal', 'done', 'amount', 'transferred', 'drawers',
'account', 'payees', 'account', 'third', 'party', 'visit', 'bank', 'submit', 'cheque',
'case', 'crossed', 'cheque', 'drawer', 'must', 'draw', 'two', 'lines', 'left', 'top',
'corner']
['cheque', 'reaches', 'bank', 'torn', 'condition', 'called', 'mutilated', 'cheque',
'cheque', 'torn', 'two', 'pieces', 'relevant', 'information', 'torn', 'bank', 'shall',
'reject', 'cheque', 'declare', 'invalid', 'drawer', 'confirms', 'validation', 'cheque',
'torn', 'corners', 'important', 'data', 'cheque', 'intact', 'bank', 'may', 'process',
'cheque']

```
['cheque', 'drawers', 'signature', 'fields', 'left', 'empty', 'type', 'cheque', 'called',
'blank', 'cheque', 'mentioned', 'types', 'cheques', 'commonly', 'known', 'used', 'indian',
'banking']
```

Stemming

```
['movies', 'films', 'type', 'visual', 'communicate', 'uses', 'move', 'picture', 'sound',
'tell', 'story', 'teach', 'people', 'something', 'people', 'watch', 'view', 'movies',
'type', 'entertain', 'way', 'fun', 'people', 'fun', 'movies', 'mean', 'movies', 'make',
'laugh', 'others', 'mean', 'movies', 'make', 'cry', 'feel']
['movies', 'made', 'shown', 'screen', 'cinemas', 'home', 'movies', 'shown', 'cinemas',
'period', 'week', 'month', 'may', 'market', 'several', 'medias', 'shown', 'pay',
'television', 'cable', 'television', 'sold', 'rented', 'dvd', 'disk', 'videocassette',
'tapes', 'people', 'watch', 'movies', 'home', 'also', 'download', 'stream', 'movies',
'older', 'movies', 'shown', 'television', 'broadcasting']
['movie', 'camera', 'video', 'camera', 'takes', 'picture', 'quick', 'usual', '24', '25',
'picture', 'frame', 'every', 'second', 'movie', 'projector', 'computer', 'television',
'shows', 'picture', 'rate', 'looks', 'like', 'thing', 'shown', 'set', 'picture', 'really',
'move', 'sound', 'either', 'record', 'time', 'add', 'later']
['screenwriter', 'write', 'script', 'story', 'movie', 'dialogue', 'thing', 'actors',
'say', 'produce', 'hires', 'people', 'work', 'movie', 'gets', 'money', 'needed', 'pay',
'actors', 'equipment', 'producers', 'usual', 'get', 'money', 'borrowing', 'bank',
'getting', 'investors', 'lend', 'money', 'movie']
['actors', 'directors', 'read', 'scripts', 'find', 'say', 'actors', 'memorize', 'words',
'script', 'say', 'movie', 'learn', 'actions', 'script', 'tells', 'director', 'tells',
'actors', 'cameraman', 'takes', 'motion', 'picture', 'motion', 'picture']
['bearer', 'chequ', 'type', 'chequ', 'bearer', 'authoris', 'get', 'chequ', 'encash',
'mean', 'person', 'carri', 'chequ', 'bank', 'author', 'ask', 'bank', 'encash', 'type',
'chequ', 'use', 'cash', 'withdraw', 'kind', 'chequ', 'endors', 'kind', 'identif',
'requir', 'bearer']
['type', 'chequ', 'cannot', 'endors', 'ie', 'paye', 'whose', 'name', 'mention', 'chequ',
'liabl', 'get', 'cash', 'amount', 'drawer', 'need', 'strike', 'bearer', 'mark', 'mention',
'chequ', 'chequ', 'encash']
['type', 'chequ', 'cash', 'withdraw', 'done', 'amount', 'transferred', 'drawer',
'account', 'paye', 'account', 'third', 'parti', 'visit', 'bank', 'submit', 'chequ',
'case', 'cross', 'chequ', 'drawer', 'must', 'draw', 'two', 'line', 'left', 'top',
'corner']
['chequ', 'reach', 'bank', 'torn', 'condit', 'call', 'mutil', 'chequ', 'chequ', 'torn',
'two', 'piec', 'relev', 'information', 'torn', 'bank', 'shall', 'reject', 'chequ',
'declar', 'invalid', 'drawer', 'confirm', 'valid', 'chequ', 'torn', 'corner', 'import',
'data', 'chequ', 'intact', 'bank', 'may', 'process', 'chequ']
['chequ', 'drawer', 'signatur', 'field', 'left', 'empti', 'type', 'chequ', 'call',
'blank', 'chequ', 'mention', 'type', 'chequ', 'commonli', 'known', 'use', 'indian',
'bank']
```

Vocabulary

```
['24', '25', 'account', 'actions', 'actors', 'add', 'also', 'amount', 'ask', 'author',
'authoris', 'bank', 'bearer', 'blank', 'borrowing', 'broadcasting', 'cable', 'call',
'camera', 'cameraman', 'cannot', 'carri', 'case', 'cash', 'chequ', 'cinemas', 'commonli',
'communicate', 'computer', 'condit', 'confirm', 'corner', 'cross', 'cry', 'data',
'declar', 'dialogue', 'director', 'directors', 'disk', 'done', 'download', 'draw',
'drawer', 'dvd', 'either', 'empti', 'encash', 'endors', 'entertain', 'equipment', 'every',
'feel', 'field', 'films', 'find', 'frame', 'fun', 'get', 'gets', 'getting', 'hires',
'home', 'identif', 'ie', 'import', 'indian', 'information', 'intact', 'invalid',
```

'investors', 'kind', 'known', 'later', 'laugh', 'learn', 'left', 'lend', 'liabl', 'like',
'line', 'looks', 'made', 'make', 'mark', 'market', 'may', 'mean', 'medias', 'memorize',
'mention', 'money', 'month', 'motion', 'move', 'movie', 'movies', 'must', 'mutil', 'name',
'need', 'needed', 'older', 'others', 'parti', 'pay', 'paye', 'people', 'period', 'person',
'picture', 'piec', 'process', 'produce', 'producers', 'projector', 'quick', 'rate',
'reach', 'read', 'really', 'record', 'reject', 'relev', 'rented', 'requir', 'say',
'screen', 'screenwriter', 'script', 'scripts', 'second', 'set', 'several', 'shall',
'shown', 'shows', 'signatur', 'sold', 'something', 'sound', 'story', 'stream', 'strike',
'submit', 'takes', 'tapes', 'teach', 'television', 'tell', 'tells', 'thing', 'third',
'time', 'top', 'torn', 'transferred', 'two', 'type', 'use', 'uses', 'usual', 'valid',
'video', 'videocassette', 'view', 'visit', 'visual', 'watch', 'way', 'week', 'whose',
'withdraw', 'words', 'work', 'write']

Matrix

```
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0    1    0    0    0    0    1    0    1    1    1    0    0    0    0    0    0
Doc2:   0    0    0    0    0    0    1    0    0    0    0    0    0    0    0    1    1    0    0    0    0
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Doc3:   1    1    0    0    0    1    0    0    0    0    0    0    0    0    0    0    0    0    1    0    0
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Doc4:   0    0    0    0    1    0    0    0    0    0    0    1    0    0    1    0    0    0    0    0    0
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Doc5:   0    0    0    1    1    0    0    0    0    0    0    0    0    0    0    0    0    0    0    1    0
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Doc6:   0   0   0   0   0   0   0   0   1   1   1   1   1   0   0   0   0   0   0   0   0
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Doc7:   0   0   0   0   0   0   0   1   0   0   0   0   1   0   0   0   0   0   0   0   1
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0   0   0   0   0   0   0   0   0   0   0   0   1   0   0   0   0
Doc8:   0   0   1   0   0   0   0   1   0   0   0   1   0   0   0   0   0   0   0   0   0
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Doc9:   0   0   0   0   0   0   0   0   0   0   0   1   0   0   0   0   0   1   0   0   0
0   0   0   1   0   0   0   0   1   1   1   0   0   1   1   0   0   0   0   0   0   0   1
0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   1   0
1   1   1   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   1   0   0   0
0   0   0   0   0   0   0   0   1   0   0   0   0   0   0   0   0   0   0   0   1   1
0   0   0   0   0   1   0   0   0   1   1   0   0   0   0   0   0   0   0   0   0   1   0
0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   1   0   1   0
0   0   0   1   0   0   0   0   0   0   0   0   0   0   0   0   0
Doc10:   0   0   0   0   0   0   0   0   0   0   0   1   0   1   0   0   0   1   0   0   0
0   0   0   1   0   1   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   1
0   0   1   0   0   0   0   0   0   1   0   0   0   0   0   0   0   0   0   0   0   1
0   0   0   0   0   1   0   0   0   1   0   0   0   0   0   0   0   0   0   0   0   0
1   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
0   1   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   1
1   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
```