Results of the test cases

Test Case 1: 'snow leopard'

```
ab3900@brussels:~/ADBProject1$ python main.py
JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs 1.0 'snow leopard'
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27snow%20leopard%27&$top=10&$
format=ison
Parameters:
Client key = JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs
         = snow leopard
Precision = 0.9
Url:
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27snow%20leopard%27&$top=10&$
format=ison
Total no of results: 10
Bing Search Results:
_____
Result 1
URL: http://en.wikipedia.org/wiki/Snow Leopard
Title: Snow leopard - Wikipedia, the free encyclopedia
Summary: Snow leopards are slightly smaller than the other big cats but, like them, exhibit a range
of sizes, generally weighing between 27 and 55 kg (60 and 121 lb), with an ...
1
Relevant (Y/N)?: n
Result 2
URL: http://animals.nationalgeographic.com/animals/mammals/snow-leopard/
Title: Snow Leopards, Snow Leopard Pictures, Snow Leopard Facts ...
Summary: Learn all you wanted to know about snow leopards with pictures, videos, photos, facts,
and news from National Geographic.
]
Relevant (Y/N)?: n
Result 3
URL: http://store.apple.com/us/product/MC573Z/A/mac-os-x-106-snow-leopard
Title: Mac OS X 10.6 Snow Leopard - Apple Store (U.S.)
Summary: If you need to purchase Mac OS X 10.6 Snow Leopard, you may order it from this page.
The most current version of OS X is OS X 10.9 Mavericks.
Relevant (Y/N)?: y
Result 4
URL: http://www.defenders.org/snow-leopard/basic-facts
Title: Snow Leopard | Basic Facts About Snow Leopards | Defenders ...
Summary: Learn about the size, diet, population, range, behavior and other fascinating facts about
snow leopards.
Relevant (Y/N)?: n
```

```
Result 5
URL: http://worldwildlife.org/species/snow-leopard
Title: Snow Leopard | Species | WWF - World Wildlife Fund
Summary: The snow leopard?s powerful build allows it to scale great steep slopes with ease. Its
hind legs give the snow leopard the ability to leap six times the length of ...
Relevant (Y/N)?: n
Result 6
URL: http://animals.sandiegozoo.org/animals/snow-leopard
Title: Snow Leopard | San Diego Zoo Animals
Summary: So how do snow leopards live at high altitudes? They keep mainly to cliffs and rocky
slopes, below the permanent snow line. Snow leopards have a relatively small head ...
Relevant (Y/N)?: n
Result 7
URL: http://www.apple.com/support/snowleopard/
Title: Apple - Support - Snow Leopard
Summary: Get help with installing and using Snow Leopard, setting up email accounts, connecting
to the Internet, troubleshooting, and much more.
Relevant (Y/N)?: y
Result 8
URL: http://www.snowleopard.org/
Title: Snow Leopard Trust - Official Site
Summary: Located in Seattle, they work to protect the endangered snow leopard and its Central
Asian habitat.
Relevant (Y/N)?: n
Result 9
URL: http://www.apple.com/osx/
Title: OS X - Official Site
Summary: The new OS X is loaded with new features, apps, and technologies that give you the
power to do more. And make your Mac even more energy-efficient.
1
Relevant (Y/N)?: y
Result 10
URL: http://www.amazon.com/s?ie=UTF8&page=1&rh=i%3Aaps%2Ck%3Asnow%20leopard
Title: Amazon.com: snow leopard
Summary: Mac OS X Server v10.6.3 Snow Leopard - Unlimited Client License by Apple Mac OS
X 10.6 "Snow Leopard" Server Unlimited MC190Z/A (DVD-ROM) - Mac OS X Intel
]
Relevant (Y/N)?: y
FEEDBACK SUMMARY
```

Query snow leopard

Precision from user relevance feedback - 0.4

```
Indexing results ....
Augmented by x os
Determining the best order of terms
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27os%20x%20snow%20leopard%27
&$top=10&$format=ison
Parameters:
Client key = JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs
         = os x snow leopard
Precision = 1.0
Url:
https://api.datamarket.azure.com/Bing/Search/Web?Ouery=%27os%20x%20snow%20leopard%27
&$top=10&$format=ison
Total no of results: 10
Bing Search Results:
Result 1
URL: http://www.apple.com/support/snowleopard/
Title: Apple - Support - Snow Leopard
Summary: Get help with installing and using Snow Leopard, setting up email accounts, connecting
to the Internet, troubleshooting, and much more.
Relevant (Y/N)?: y
Result 2
URL: http://en.wikipedia.org/wiki/Mac_OS_X_Snow_Leopard
Title: Mac OS X Snow Leopard - Wikipedia, the free encyclopedia
Summary: Mac OS X Snow Leopard (version 10.6) is the seventh major release of Mac OS X,
Apple's desktop and server operating system for Macintosh computers. Snow Leopard was ...
Relevant (Y/N)?: y
Result 3
URL: http://www.apple.com/osx/
Title: OS X - Official Site
Summary: The new OS X is loaded with new features, apps, and technologies that give you the
power to do more. And make your Mac even more energy-efficient.
Relevant (Y/N)?: y
Result 4
URL: http://www.amazon.com/version-Leopard-computer-processor-required/dp/B001AMHWP8
Title: Amazon.com: Mac OS X version 10.6.3 Snow Leopard (Mac ...
Summary: Mac OS X Snow Leopard is an even more powerful and refined version of the world?s
most advanced operating system. In ways big and small, it gets faster, more ...
Relevant (Y/N)?: y
Result 5
URL: http://store.apple.com/us/product/MC573Z/A/mac-os-x-106-snow-leopard
```

Target Precision - 1.0

```
Title: Mac OS X 10.6 Snow Leopard - Apple Store (U.S.)
Summary: If you need to purchase Mac OS X 10.6 Snow Leopard, you may order it from this page.
The most current version of OS X is OS X 10.9 Mayericks.
Relevant (Y/N)?: y
Result 6
URL: http://www.ebay.com/sch/i.html? nkw=os+x+snow+leopard
Title: os x snow leopard | eBay - Electronics, Cars, Fashion ...
Summary: Find great deals on eBay for os x snow leopard and os x lion. Shop with confidence.
Relevant (Y/N)?: y
Result 7
URL: http://download.cnet.com/Apple-Mac-OS-X-Snow-Leopard/3000-18513_4-90306.html
Title: Apple Mac OS X Snow Leopard for Mac - Free download and ...
Summary: Sneaking in a few days before its promised September release, the tune-up for Mac OS
X Leopard costs $29 for current Leopard users, and packs just enough ...
Relevant (Y/N)?: y
Result 8
URL: http://www.ebay.com/sch/i.html? nkw=os+x+leopard
Title: os x leopard | eBay - Electronics, Cars, Fashion ...
Summary: Find great deals on eBay for os x leopard and os x leopard 10.5. Shop with confidence.
1
Relevant (Y/N)?: y
Result 9
URL: http://www.cnet.com/mac-os-x-snow-leopard/
Title: Mac OS X - Apple Mac Lion and Snow Leopard reviews and ...
Summary: CNET's comprehensive Mac OS X Lion and OS X Snow Leopard coverage: Get in-
depth analysis of Lion's new features, how much it will cost you, what you'll ...
]
Relevant (Y/N)?: y
Result 10
URL:
http://www.amazon.com/s?ie=UTF8&page=1&rh=i%3Aaps%2Ck%3Asnow%20leopard%20mac%
20os%20x%2010.6
Title: "snow leopard mac os x 10.6" - Amazon.com: Online Shopping ...
Summary: Amazon Cloud Player for Mac [Download] by Amazon Digital Services Inc. (Software
Download - Oct. 29, 2013) - Mac OS X 10.6 Snow Leopard / 10.7 Lion / 10.8 Mountain Lion
]
Relevant (Y/N)?: y
FEEDBACK SUMMARY
Query os x snow leopard
Precision from user relevance feedback - 1.0
Target Precision - 1.0
Desired precision reached, done
ab3900@brussels:~/ADBProject1$
```

Test Case 2: gates

```
ab3900@brussels:~/ADBProject1$ python main.py
JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs 0.9 gates
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27gates%27&$top=10&$format=json
Parameters:
Client key = JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs
Ouerv
         = gates
Precision = 0.9
Url:
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27gates%27&$top=10&$format=json
Total no of results: 10
Bing Search Results:
Result 1
URL: http://gates.com/
Title: Gates - Powering Progress? in belts, hose & hydraulics
Summary: Gates Corporation is Powering Progress? in the Oil & Gas, Energy, Mining, Marine,
Agriculture, Transportation and Automotive Industries.
Relevant (Y/N)?: n
Result 2
URL: http://www.gatecrafters.com/design_your_gates.aspx
Title: Driveway Gates | Automatic Gates | Electric Gates
Summary: Driveway Gates - Automatic Gates The high-quality driveway gates from
GateCrafters.com come in a wide variety of options to ...
Relevant (Y/N)?: n
Result 3
URL: http://www.gates.com/automotive.cfm
Title: Automotive | Gates Corporation
Summary: Gates offers the most complete line of original equipment products, including
automotive hoses, belts & accessories for the automotive aftermarket.
Relevant (Y/N)?: n
Result 4
URL: http://www.amazon.com/s?ie=UTF8&page=1&rh=i%3Aaps%2Ck%3Agates
Title: Amazon.com: gates
Summary: "gates" Showing 1 - 16 of 334,134 Results. Choose a Department to enable sorting. 1.
Duty: Memoirs of a Secretary at War by Robert Michael Gates (Hardcover - Jan ...
Relevant (Y/N)?: n
Result 5
URL: http://www.toysrus.com/category/index.jsp?categoryId=3243470
Title: Safety Gates - Health & Safety - Babies "R" Us
Summary: Safety gates available at Babies'R'Us with the best prices and top selections! Shop now
```

```
for quality, safe and durable baby safety gates and accessories!
Relevant (Y/N)?: n
Result 6
URL: http://en.wikipedia.org/wiki/Bill_Gates
Title: Bill Gates - Wikipedia, the free encyclopedia
Summary: William Henry "Bill" Gates III (born October 28, 1955) is an American business
magnate, investor, programmer, inventor and philanthropist. Gates is the ...
Relevant (Y/N)?: y
Result 7
URL: http://dictionary.reference.com/browse/gates
Title: Gates | Define Gates at Dictionary.com
Summary: gate 1 (?e?t) ?n: 1. a movable barrier, usually hinged, for closing an opening in a wall,
fence, etc: 2. an opening to allow passage into or out of an enclosed place
1
Relevant (Y/N)?: n
Result 8
URL: http://en.wikipedia.org/wiki/Gate
Title: Gate - Wikipedia, the free encyclopedia
Summary: Types . Types of gates include: Baby gate; City gate; Hampshire gate; Kissing gate; Lych
gate; Mon (architecture), Japanese gates of many varieties including the Torii
1
Relevant (Y/N)?: n
Result 9
URL: http://www.townofgates.org/
Title: Town of Gates - A Community For All People
Summary: Gates, New York is a dynamic town in Monroe County with an interesting past and a
bright future. The town was incorporated in 1813 and was the last remnants of ...
]
Relevant (Y/N)?: n
Result 10
URL: http://www.microsoft.com/en-us/news/exec/billg/
Title: Bill Gates: Founder and Technology Advisor
Summary: Updated: Feb. 4, 2014. William (Bill) H. Gates is founder, technology advisor and board
member of Microsoft Corporation, the worldwide leader in software ...
1
Relevant (Y/N)?: y
FEEDBACK SUMMARY
Ouery gates
Precision from user relevance feedback - 0.2
Target Precision - 0.9
Indexing results ....
Augmented by bill
Determining the best order of terms
```

```
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27bill%20gates%27&$top=10&$form
at=ison
Parameters:
Client key = JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs
          = bill gates
Ouerv
Precision = 0.9
Url:
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27bill%20gates%27&$top=10&$form
at=ison
Total no of results: 10
Bing Search Results:
Result 1
URL: http://www.thegatesnotes.com/
Title: Bill Gates - Official Site
Summary: The debate over education in the United States is getting clouded by myths?especially
myths about the academic standards known as Common Core.
Relevant (Y/N)?: y
Result 2
URL: http://en.wikipedia.org/wiki/Bill Gates
Title: Bill Gates - Wikipedia, the free encyclopedia
Summary: William Henry "Bill" Gates III (born October 28, 1955) is an American business
magnate, investor, programmer, inventor and philanthropist. Gates is the ...
Relevant (Y/N)?: y
Result 3
URL: http://www.biography.com/people/bill-gates-9307520
Title: Bill Gates Biography - Facts, Birthday, Life Story ...
Summary: Biography.com tracks the life and career of Bill Gates, from his early interest in
computer programming to his place as founder of Microsoft, the world's largest ...
Relevant (Y/N)?: y
Result 4
URL: http://www.microsoft.com/en-us/news/exec/billg/
Title: Bill Gates: Founder and Technology Advisor
Summary: Updated: Feb. 4, 2014. William (Bill) H. Gates is founder, technology advisor and board
member of Microsoft Corporation, the worldwide leader in software ...
1
Relevant (Y/N)?: y
Result 5
URL: http://www.gatesfoundation.org/
Title: Bill & Melinda Gates Foundation - Official Site
Summary: About the Foundation. Guided by the belief that every life has equal value, the Bill and
Melinda Gates Foundation aspires to help all people lead healthy ...
Relevant (Y/N)?: y
```

```
URL: http://www.forbes.com/profile/bill-gates/
Title: Bill Gates - Forbes - Information for the World's Business ...
Summary: Bill Gates is the wealthiest man in the U.S. (and the world, for that matter), despite past
gifts of more than $28 billion to the Bill & Melinda Gates Foundation.
Relevant (Y/N)?: v
Result 7
URL: http://www.imdb.com/name/nm0309540/
Title: Bill Gates - IMDb
Summary: Bill Gates, Self: Freakonomics. Born William Henry III is an American entrepreneur,
business mogul, investor, philanthropist, and widely known as one of the most ...
Relevant (Y/N)?: y
Result 8
URL: http://www.huffingtonpost.com/news/bill-gates/
Title: Bill Gates: Pictures, Videos, Breaking News
Summary: Big News on Bill Gates, Includes blogs, news, and community conversations about Bill
Gates.
1
Relevant (Y/N)?: y
Result 9
ſ
URL: http://topics.nytimes.com/top/reference/timestopics/people/g/bill gates/index.html
Title: Bill Gates News - The New York Times
Summary: News about Bill Gates. Commentary and archival information about Bill Gates from The
New York Times.
1
Relevant (Y/N)?: y
Result 10
URL: http://topics.wsj.com/person/g/bill-gates/685
Title: Bill Gates - News, Articles, Biography, Photos - WSJ.com
Summary: Chairman and founder, Microsoft Corp. William "Bill" H. Gates is chairman of
Microsoft Corp. Subscriber Content Read Preview The Daily Docket: Bill Gates Controlled ...
1
Relevant (Y/N)?: y
FEEDBACK SUMMARY
Query bill gates
Precision from user relevance feedback - 1.0
Target Precision - 0.9
Desired precision reached, done
ab3900@brussels:~/ADBProject1$
```

Result 6

ab3900@brussels:~/ADBProject1\$ python main.py

```
JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs 0.9 columbia
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27columbia%27&$top=10&$format=
Parameters:
Client key = JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs
         = columbia
Precision = 0.9
Url:
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27columbia%27&$top=10&$format=
ison
Total no of results: 10
Bing Search Results:
Result 1
URL: http://www.columbia.com/
Title: Columbia Sportswear - Official Site
Summary: Shop direct from Columbia Sportswear. Buy Columbia jackets, pants, shirts, fleece,
shoes, boots & sweaters. Visit our blog, watch videos & meet our athletes.
Relevant (Y/N)?: n
Result 2
URL: http://www.columbia.edu/
Title: Columbia University - Official Site
Summary: Founded in 1754 as King's College by royal charter, it is the oldest institution of higher
learning in the State of New York. Located in New York City and a member of ...
Relevant (Y/N)?: y
Result 3
URL: http://en.wikipedia.org/wiki/Columbia_(name)
Title: Columbia (name) - Wikipedia, the free encyclopedia
Summary: Columbia is a historical and poetic name used for the United States of America and is
also the name of its female personification. It has inspired the names of many ...
Relevant (Y/N)?: n
Result 4
URL: http://columbiasc.net/
Title: :: Welcome to the City of Columbia ::
Summary: The Columbia City Hall, also known as Old United States Court House and Post Office,
was built in 1870. It was listed on the National Register of Historic Places in 1973.
Relevant (Y/N)?: n
Result 5
URL: http://www.columbia.com/on/demandware.store/Sites-Columbia_US-Site/default/Home-
```

```
Title: Columbia Sportswear | International > Select a Country
Summary: Welcome to the Greater Outdoors. Experience the Columbia Sportswear website specific
to your country and language. Learn more about our products and find out where to ...
1
Relevant (Y/N)?: n
Result 6
URL: http://www.gocolumbiamo.com/
Title: Columbia, Missouri - Official Site
Summary: The City of Columbia Missouri's official web site. Perform business transactions, view
services, department information, upcoming meetings and events.
1
Relevant (Y/N)?: n
Result 7
URL: http://www8.gsb.columbia.edu/
Title: Home | Columbia Business School
Summary: Columbia Business School brings a global perspective, cutting-edge methodology, and
the energy of New York City to its MBA, EMBA, Executive Education, PhD, and MS ...
Relevant (Y/N)?: y
Result 8
URL: http://en.wikipedia.org/wiki/Columbia university
Title: Columbia University - Wikipedia, the free encyclopedia
Summary: Columbia University in the City of New York, commonly referred to as Columbia
University, is an American private Ivy League research university located in ...
Relevant (Y/N)?: y
Result 9
URL: http://www.visitcolumbiacalifornia.com/
Title: Columbia, California | Historic Gold Rush Town
Summary: Come discover Columbia and explore the rich history of this charming California Gold
Rush town located in the heart of the Mother Lode off of highway 49.
Relevant (Y/N)?: n
Result 10
URL: http://new.sipa.columbia.edu/
Title: Columbia | SIPA | School of International and Public Affairs
Summary: Columbia SIPA is the world?s most global public policy school. SIPA offers MPA, MIA
and PhD degrees focused on the skills and knowledge needed to solve the most ...
]
Relevant (Y/N)?: y
FEEDBACK SUMMARY
Query columbia
Precision from user relevance feedback - 0.4
Target Precision - 0.9
Indexing results ....
```

SelectCountry

```
Determining the best order of terms
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27columbia%20university%27&$top
=10&\format=ison
Parameters:
Client key = JsV9AIVwzY0l654YiaIXAppMcpvpm7lvkcYdmzJrNcs
Ouerv
         = columbia university
Precision = 0.9
Url:
https://api.datamarket.azure.com/Bing/Search/Web?Query=%27columbia%20university%27&$top
=10&\format=ison
Total no of results: 10
Bing Search Results:
_____
Result 1
URL: http://www.columbia.edu/
Title: Columbia University - Official Site
Summary: Founded in 1754 as King's College by royal charter, it is the oldest institution of higher
learning in the State of New York. Located in New York City and a member of ...
Relevant (Y/N)?: v
Result 2
URL: http://en.wikipedia.org/wiki/Columbia_university
Title: Columbia University - Wikipedia, the free encyclopedia
Summary: Columbia University in the City of New York, commonly referred to as Columbia
University, is an American private Ivy League research university located in ...
Relevant (Y/N)?: y
Result 3
URL: http://www.columbia.edu/content/admissions.html
Title: Admissions | Columbia University in the City of New York
Summary: For information on admission to a Columbia school, select the appropriate school from
the drop-down menu on the right.
Relevant (Y/N)?: y
Result 4
URL: http://colleges.usnews.rankingsandreviews.com/best-colleges/columbia-university-2707
Title: Columbia University | Best College | US News
Summary: Is Columbia University the best college for you? Find out at US News. See if Columbia
University is ranked and get info on admission, tuition, student life, and more.
Relevant (Y/N)?: y
Result 5
URL: http://www.college.columbia.edu/
Title: Columbia College, Columbia University - Official Site
Summary: Columbia College is pleased to introduce the new Columbia College Annual Report,
```

Augmented by university

```
which for the first time not only highlights the Columbia College Fund, as in the ...
Relevant (Y/N)?: y
Result 6
URL: http://www.columbia.edu/content/about-columbia.html
Title: About Columbia | Columbia University in the City of New York
Summary: Columbia is led by President Lee C. Bollinger. The University's governance is directed
by the 24-member Board of Trustees and by the University Senate.
1
Relevant (Y/N)?: y
Result 7
URL: http://arts.columbia.edu/columbia-university
Title: Columbia University | Columbia University School of the Arts
Summary: From a one-room classroom with one professor and eight students, Columbia University
has grown to include more than 4,000 faculty members and 23,000 students.
Relevant (Y/N)?: v
Result 8
URL:
http://topics.nytimes.com/top/reference/timestopics/organizations/c/columbia university/index.html
Title: Columbia University's - Times Topics - The New York Times
Summary: News about Columbia University. Commentary and archival information about
Columbia University from The New York Times.
Relevant (Y/N)?: y
Result 9
URL: http://www.columbia.edu/content/employment-columbia.html
Title: Employment at Columbia | Columbia University in the City ...
Summary: Opportunities at Columbia. Columbia University is committed to attracting, encouraging
and retaining a highly qualified workforce to support our mission of excellence ...
Relevant (Y/N)?: y
Result 10
URL: http://www.gocolumbialions.com/
Title: Columbia Lions football - Official Site
Summary: The Official Online Home of the Columbia Lions, Columbia Athletics, Columbia
University, Columbia Lions Official Merchandise, Columbia Lions broadcasting
1
Relevant (Y/N)?: y
_____
FEEDBACK SUMMARY
Query columbia university
Precision from user relevance feedback - 1.0
Target Precision - 0.9
Desired precision reached, done
ab3900@brussels:~/ADBProject1$
```