**List of APIs used in the Wikipedia Project:-**

1. <http://en.wikipedia.org/w/api.php?action=opensearch&limit=20&search>=

This API is used for open-search in the Wikipedia. This is just like an auto-complete search feature which gives suggestions when we type something to search in the textbox. For example: If we type INDIA in the search box and hit the search button, then by using this API, it will return at most 20 results (because limit set is 20) starting with the word INDIA. And if we ignore the limit, then bydefault limit is set to 10.

When we search for the keyword “India”, the API result is as:

["India",["India","Indian Standard Time","Indiana","Indianapolis","Indian National Congress","Indian Ocean","Indianapolis Colts","Indiana University","Indian Railways","Indian subcontinent","Indian Rebellion of 1857","India national cricket team","Indian independence movement","Indian Army","Indianapolis 500"]]

This is the JSON format, however we can also use XML format.

1. <http://en.wikipedia.org/w/api.php?action=query&prop=extracts&format=json&exlimit=1&exintro=&indexpageids=&titles>=

This API is used to fetch the introduction text of the specified text. For example: If we want the introductory text for the keyword “INDIA”, then the returned output would be:

{"query":{"pageids":["14533"],"pages":{"14533":{"pageid":14533,"ns":0,"title":"India","extract**":"<p><b>India</b> (/\u02c8\u026andi\u0259/), officially the <b>Republic of India</b> (<i>Bharat Ganrajya</i>), is a country in South Asia. It is the seventh-largest country by area, the second-most populous country with over 1.2 billion people, and the most populous democracy in the world. Bounded by the Indian Ocean on the south, the Arabian Sea on the south-west, and the Bay of Bengal on the south-east, it shares land borders with Pakistan to the west; China, Nepal, and Bhutan to the north-east; and Burma and Bangladesh to the east. In the Indian Ocean, India is in the vicinity of Sri Lanka and the Maldives; in addition, India's Andaman and Nicobar Islands share a maritime border with Thailand and Indonesia.</p>\n<p>Home to the ancient Indus Valley Civilisation and a region of historic trade routes and vast empires, the Indian subcontinent was identified with its commercial and cultural wealth for much of its long history. Four world religions\u2014Hinduism, Buddhism, Jainism, and Sikhism\u2014originated here, whereas Judaism, Zoroastrianism, Christianity, and Islam arrived in the 1st millennium CE and also helped shape the region's diverse culture. Gradually annexed by and brought under the administration of the British East India Company from the early 18th century and administered directly by the United Kingdom from the mid-19th century, India became an independent nation in 1947 after a struggle for independence that was marked by non-violent resistance led by Mahatma Gandhi.</p>\n<p>The Indian economy is the world's tenth-largest by nominal GDP and third-largest by purchasing power parity (PPP). Following market-based economic reforms in 1991, India became one of the fastest-growing major economies; it is considered a newly industrialised country. However, it continues to face the challenges of poverty, corruption, malnutrition, inadequate public healthcare, and terrorism. A nuclear weapons state and a regional power, it has the third-largest standing army in the world and ranks eighth in military expenditure among nations. India is a federal constitutional republic governed under a parliamentary system consisting of 29 states and 7 union territories. India is a pluralistic, multilingual, and a multi-ethnic society. It is also home to a diversity of wildlife in a variety of protected habitats.</p>\n<p></p>**"}}}}

The bold text specifies the introductory text of INDIA. We would require JSON parser to parse the above text and fetch the required contents.

1. <http://en.wikipedia.org/w/api.php?action=query&prop=pageimages&format=json&piprop=thumbnail&indexpageids=&titles>=

This API is used to get the page image of the specified keyword. The page image means that the image which is available on the Wikipedia page. For example: for the word INDIA, the above API would return the following JSON text.

{"query":{"pageids":["14533"],"pages":{"14533":{"pageid":14533,"ns":0,"title":"India","thumbnail":{"source":"**http://upload.wikimedia.org/wikipedia/en/thumb/4/41/Flag\_of\_India.svg/50px-Flag\_of\_India.svg.png**","width":50,"height":33}}}}}

The bold text specifies the URL of the image which we need. If we go to the above URL, then we would find out the same image as available on the Wikipedia page.

1. <http://en.wikipedia.org/w/api.php?action=parse&format=json&prop=sections&redirects&page>=

The above API results the table of contents list. To get the better understanding about table of content, the image below may be helpful:



This is the Table of Content for the page INDIA.

But the API results in JSON format as follows:

{"parse":{"title":"India","redirects":[],"sections**":[{"toclevel":1,"level":"2","line":"Etymology","number":"1","index":"1","fromtitle":"India","byteoffset":13361,"anchor":"Etymology"},{"toclevel":1,"level":"2","line":"History","number":"2","index":"2","fromtitle":"India","byteoffset":14688,"anchor":"History"},{"toclevel":2,"level":"3","line":"Ancient India","number":"2.1","index":"3","fromtitle":"India","byteoffset":14760,"anchor":"Ancient\_India"},{"toclevel":2,"level":"3","line":"Medieval India","number":"2.2","index":"4","fromtitle":"India","byteoffset":20985,"anchor":"Medieval\_India"},{"toclevel":2,"level":"3","line":"Early modern India","number":"2.3","index":"5","fromtitle":"India","byteoffset":25150,"anchor":"Early\_modern\_India"},{"toclevel":2,"level":"3","line":"Modern India","number":"2.4","index":"6","fromtitle":"India","byteoffset":29378,"anchor":"Modern\_India"},{"toclevel":1,"level":"2","line":"Geography","number":"3","index":"7","fromtitle":"India","byteoffset":35917,"anchor":"Geography"},{"toclevel":1,"level":"2","line":"Biodiversity","number":"4","index":"8","fromtitle":"India","byteoffset":42033,"anchor":"Biodiversity"},{"toclevel":1,"level":"2","line":"Politics","number":"5","index":"9","fromtitle":"India","byteoffset":46825,"anchor":"Politics"},{"toclevel":2,"level":"3","line":"Government","number":"5.1","index":"10","fromtitle":"India","byteoffset":51638,"anchor":"Government"},{"toclevel":2,"level":"3","line":"Subdivisions","number":"5.2","index":"11","fromtitle":"India","byteoffset":57099,"anchor":"Subdivisions"},{"toclevel":1,"level":"2","line":"Foreign relations and military","number":"6","index":"12","fromtitle":"India","byteoffset":58888,"anchor":"Foreign\_relations\_and\_military"},{"toclevel":1,"level":"2","line":"Economy","number":"7","index":"13","fromtitle":"India","byteoffset":66294,"anchor":"Economy"},{"toclevel":1,"level":"2","line":"Demographics","number":"8","index":"14","fromtitle":"India","byteoffset":82605,"anchor":"Demographics"},{"toclevel":1,"level":"2","line":"Culture","number":"9","index":"15","fromtitle":"India","byteoffset":88960,"anchor":"Culture"},{"toclevel":2,"level":"3","line":"Art and architecture","number":"9.1","index":"16","fromtitle":"India","byteoffset":91187,"anchor":"Art\_and\_architecture"},{"toclevel":2,"level":"3","line":"Literature","number":"9.2","index":"17","fromtitle":"India","byteoffset":92728,"anchor":"Literature"},{"toclevel":2,"level":"3","line":"Performing arts","number":"9.3","index":"18","fromtitle":"India","byteoffset":94427,"anchor":"Performing\_arts"},{"toclevel":2,"level":"3","line":"Motion pictures","number":"9.4","index":"19","fromtitle":"India","byteoffset":97768,"anchor":"Motion\_pictures"},{"toclevel":2,"level":"3","line":"Society","number":"9.5","index":"20","fromtitle":"India","byteoffset":99220,"anchor":"Society"},{"toclevel":2,"level":"3","line":"Clothing","number":"9.6","index":"21","fromtitle":"India","byteoffset":104876,"anchor":"Clothing"},{"toclevel":2,"level":"3","line":"Sport","number":"9.7","index":"22","fromtitle":"India","byteoffset":105701,"anchor":"Sport"},{"toclevel":1,"level":"2","line":"See also","number":"10","index":"23","fromtitle":"India","byteoffset":111141,"anchor":"See\_also"},{"toclevel":1,"level":"2","line":"Notes","number":"11","index":"24","fromtitle":"India","byteoffset":111226,"anchor":"Notes"},{"toclevel":1,"level":"2","line":"References","number":"12","index":"25","fromtitle":"India","byteoffset":111252,"anchor":"References"},{"toclevel":1,"level":"2","line":"Bibliography","number":"13","index":"26","fromtitle":"India","byteoffset":111285,"anchor":"Bibliography"},{"toclevel":1,"level":"2","line":"External links","number":"14","index":"27","fromtitle":"India","byteoffset":169604,"anchor":"External\_links"}]**}}

1. http://en.wikipedia.org/w/api.php?action=query&prop=revisions&rvprop=content&format=json&rvparse&titles=?&rvsection=?"

This API results the content available in the Table of Contents of the particular page. The title in the API defines the page we are searching for, and the rvsection (integer value only) specifies the index number of the table of content we want to get. For example: consider title=INDIA and rvsection =1 will result for the content about the Emytology (see the image for better understanding). The rvsection is the index of the particular table of content starting from 1. When we get the table of contents list in JSON format, “rvsection” takes value from the “index” field of that json formatted text.

**{"toclevel":1,"level":"2","line":"Etymology","number":"1","index":"1","fromtitle":"India","byteoffset":13361,"anchor":"Etymology"}**

But the above API would result as:

{"query":{"pages":{"14533":{"pageid":14533,"ns":0,"title":"India","revisions":[{"\*":"**<h2><span class=\"mw-headline\" id=\"Etymology\">Etymology</span><span class=\"mw-editsection\"><span class=\"mw-editsection-bracket\">[</span><a href=\"/w/index.php?title=India&amp;action=edit&amp;section=1\" title=\"Edit section: Etymology\">edit</a><span class=\"mw-editsection-bracket\">]</span></span></h2>\n<div class=\"hatnote relarticle mainarticle\">Main article: <a href=\"/wiki/Names\_of\_India\" title=\"Names of India\">Names of India</a></div>\nThe name <i>India</i> is derived from <i>Indus</i>, which originates from the <a href=\"/wiki/Old\_Persian\_language\" title=\"Old Persian language\" class=\"mw-redirect\">Old Persian</a> word <i><a href=\"/wiki/Hindus\" title=\"Hindus\" class=\"mw-redirect\">Hindu\u0161</a></i>. The latter term stems from the <a href=\"/wiki/Sanskrit\" title=\"Sanskrit\">Sanskrit</a> word <i>Sindhu</i>, which was the historical local appellation for the <a href=\"/wiki/Indus\_River\" title=\"Indus River\">Indus River</a>.<sup id=\"cite\_ref-FOOTNOTEOxford\_English\_Dictionary\_1-0\" class=\"reference\"><a href=\"#cite\_note-FOOTNOTEOxford\_English\_Dictionary-1\"><span>[</span>1<span>]</span></a></sup> The <a href=\"/wiki/Ancient\_Greece\" title=\"Ancient Greece\">ancient Greeks</a> referred to the Indians as <i>Indoi</i> (\u0399\u03bd\u03b4\u03bf\u03af), which translates as \"the people of the Indus\".<sup id=\"cite\_ref-FOOTNOTEKuiper201086\_2-0\" class=\"reference\"><a href=\"#cite\_note-FOOTNOTEKuiper201086-2\"><span>[</span>2<span>]</span></a></sup> The geographical term <i>Bharat</i> (<small>pronounced&#160;</small><span title=\"Representation in the International Phonetic Alphabet (IPA)\" class=\"IPA\"><a href=\"/wiki/Help:IPA\_for\_Hindi\_and\_Urdu\" title=\"Help:IPA for Hindi and Urdu\">[\u02c8b\u02b1a\u02d0r\u0259t\u032a]</a></span><small class=\"nowrap\">&#160;(<a href=\"/wiki/File:Hi-Bharat.ogg\" title=\"File:Hi-Bharat.ogg\"><img alt=\"\" src=\"//upload.wikimedia.org/wikipedia/commons/thumb/2/21/Speaker\_Icon.svg/13px-Speaker\_Icon.svg.png\" width=\"13\" height=\"13\" srcset=\"//upload.wikimedia.org/wikipedia/commons/thumb/2/21/Speaker\_Icon.svg/20px-Speaker\_Icon.svg.png 1.5x, //upload.wikimedia.org/wikipedia/commons/thumb/2/21/Speaker\_Icon.svg/26px-Speaker\_Icon.svg.png 2x\" data-file-width=\"500\" data-file-height=\"500\" /></a> <span class=\"metadata\"><a href=\"//upload.wikimedia.org/wikipedia/commons/7/79/Hi-Bharat.ogg\" class=\"internal\" title=\"Hi-Bharat.ogg\">listen</a></span>)</small>), which is recognised by the <a href=\"/wiki/Constitution\_of\_India\" title=\"Constitution of India\">Constitution of India</a> as an official name for the country, is used by <a href=\"/wiki/Names\_of\_the\_Republic\_of\_India\_in\_its\_official\_languages\" title=\"Names of the Republic of India in its official languages\">many Indian languages</a> in its variations.<sup id=\"cite\_ref-FOOTNOTEMinistry\_of\_Law\_and\_Justice\_2008\_3-0\" class=\"reference\"><a href=\"#cite\_note-FOOTNOTEMinistry\_of\_Law\_and\_Justice\_2008-3\"><span>[</span>3<span>]</span></a></sup> The <a href=\"/wiki/Eponym\" title=\"Eponym\">eponym</a> of <i>Bharat</i> is <a href=\"/wiki/Bharata\_(emperor)\" title=\"Bharata (emperor)\">Bharata</a>, a theological figure that Hindu scriptures describe as a legendary emperor of ancient India. <i><a href=\"/wiki/Hindustan\" title=\"Hindustan\">Hindustan</a></i> (<small></small><span title=\"Representation in the International Phonetic Alphabet (IPA)\" class=\"IPA\"><a href=\"/wiki/Help:IPA\_for\_Hindi\_and\_Urdu\" title=\"Help:IPA for Hindi and Urdu\">[\u0266\u026and\u032a\u028a\u02c8st\u032aa\u02d0n]</a></span><small class=\"nowrap\">&#160;(<a href=\"/wiki/File:Hindustan.ogg\" title=\"File:Hindustan.ogg\"><img alt=\"\" src=\"//upload.wikimedia.org/wikipedia/commons/thumb/2/21/Speaker\_Icon.svg/13px-Speaker\_Icon.svg.png\" width=\"13\" height=\"13\" srcset=\"//upload.wikimedia.org/wikipedia/commons/thumb/2/21/Speaker\_Icon.svg/20px-Speaker\_Icon.svg.png 1.5x, //upload.wikimedia.org/wikipedia/commons/thumb/2/21/Speaker\_Icon.svg/26px-Speaker\_Icon.svg.png 2x\" data-file-width=\"500\" data-file-height=\"500\" /></a> <span class=\"metadata\"><a href=\"//upload.wikimedia.org/wikipedia/commons/4/46/Hindustan.ogg\" class=\"internal\" title=\"Hindustan.ogg\">listen</a></span>)</small>) was originally a <a href=\"/wiki/Persian\_language\" title=\"Persian language\">Persian</a> word that meant \"Land of the Hindus\"; prior to 1947, it referred to a region that encompassed northern India and Pakistan. It is occasionally used to solely denote India in its entirety.<sup id=\"cite\_ref-FOOTNOTEKaye1997639.E2.80.93640\_4-0\" class=\"reference\"><a href=\"#cite\_note-FOOTNOTEKaye1997639.E2.80.93640-4\"><span>[</span>4<span>]</span></a></sup><sup id=\"cite\_ref-FOOTNOTEEncyclop.C3.A6dia\_Britannica\_5-0\" class=\"reference\"><a href=\"#cite\_note-FOOTNOTEEncyclop.C3.A6dia\_Britannica-5\"><span>[</span>5<span>]</span></a></sup><ol class=\"references\">\n<li id=\"cite\_note-FOOTNOTEOxford\_English\_Dictionary-1\"><span class=\"mw-cite-backlink\"><b><a href=\"#cite\_ref-FOOTNOTEOxford\_English\_Dictionary\_1-0\">^</a></b></span> <span class=\"reference-text\"><a href=\"#CITEREFOxford\_English\_Dictionary\">Oxford English Dictionary</a>.</span>\n</li>\n<li id=\"cite\_note-FOOTNOTEKuiper201086-2\"><span class=\"mw-cite-backlink\"><b><a href=\"#cite\_ref-FOOTNOTEKuiper201086\_2-0\">^</a></b></span> <span class=\"reference-text\"><a href=\"#CITEREFKuiper2010\">Kuiper 2010</a>, p.&#160;86.</span>\n</li>\n<li id=\"cite\_note-FOOTNOTEMinistry\_of\_Law\_and\_Justice\_2008-3\"><span class=\"mw-cite-backlink\"><b><a href=\"#cite\_ref-FOOTNOTEMinistry\_of\_Law\_and\_Justice\_2008\_3-0\">^</a></b></span> <span class=\"reference-text\"><a href=\"#CITEREFMinistry\_of\_Law\_and\_Justice\_2008\">Ministry of Law and Justice 2008</a>.</span>\n</li>\n<li id=\"cite\_note-FOOTNOTEKaye1997639.E2.80.93640-4\"><span class=\"mw-cite-backlink\"><b><a href=\"#cite\_ref-FOOTNOTEKaye1997639.E2.80.93640\_4-0\">^</a></b></span> <span class=\"reference-text\"><a href=\"#CITEREFKaye1997\">Kaye 1997</a>, pp.&#160;639\u2013640.</span>\n</li>\n<li id=\"cite\_note-FOOTNOTEEncyclop.C3.A6dia\_Britannica-5\"><span class=\"mw-cite-backlink\"><b><a href=\"#cite\_ref-FOOTNOTEEncyclop.C3.A6dia\_Britannica\_5-0\">^</a></b></span> <span class=\"reference-text\"><a href=\"#CITEREFEncyclop.C3.A6dia\_Britannica\">Encyclop\u00e6dia Britannica</a>.</span>\n</li>\n</ol>\n"}]}}}}**