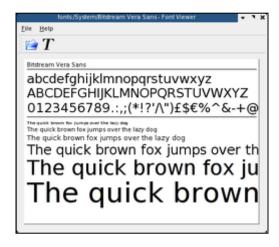
Pangram

A **pangram** or **holoalphabetic sentence** is a sentence using every letter of a given alphabet at least once. Pangrams have been used to display typefaces, test equipment, and develop skills in handwriting, calligraphy, and typing.

Origins



An English language pangram being used to demonstrate the Bitstream Vera Sans typeface

The best-known English pangram is "The quick brown fox jumps over the lazy dog".^[1] It has been used since at least the late 19th century^[1] and was used by Western Union to test Telex/TWX data communication equipment for accuracy and reliability.^[2] Pangrams like this are now used by a number of computer programs to display computer typefaces.

Short pangrams

Short pangrams in English are more difficult to devise and tend to use uncommon words and unnatural sentences. Longer pangrams afford more opportunity for humor, cleverness, or thoughtfulness.

The following are examples of pangrams that are shorter than "The quick brown fox jumps over a lazy dog" (which has 35 letters) and use standard written English without abbreviations or proper nouns:

- "Waltz, bad nymph, for quick jigs vex." (28 letters)[3]
- "Glib jocks quiz nymph to vex dwarf." (28 letters)[2]
- "Sphinx of black quartz, judge my vow." (29 letters)^[4]
- "How quickly daft jumping zebras vex!" (30 letters)[3]
- "The five boxing wizards jump quickly." (31 letters)[3]
- "Jackdaws love my big sphinx of quartz." (31 letters)^[3]
- "Pack my box with five dozen liquor jugs." (32 letters)[3]

Perfect pangrams

A perfect pangram contains every letter of the alphabet only once and can be considered an anagram of the alphabet. The only known perfect pangrams of the English alphabet use abbreviations or other non-dictionary words, such as "Blowzy night-frumps vex'd Jack Q." or "Mr. Jock, TV quiz PhD, bags few lynx." or they include words so obscure that the phrase is challenging to understand, such as "Cwm fjord-bank glyphs vext quiz", in which *cwm* is a loan word from the Welsh language meaning an amphitheatre-like glaciated depression, *vext* is an uncommon way to spell *vexed*, and *quiz* is used in an archaic sense to mean a puzzling or eccentric person. It means that symbols in the bowl-like depression on the edge of a long steep sea inlet confused an eccentric person.

Other writing systems may present more options: The Iroha is a well-known perfect pangram of the Japanese syllabary, while the Hanacaraka is a perfect pangram for the Javanese script and is commonly used to order its letters in sequence.

Other languages

Using the Latin script

Whereas the English language uses all 26 letters of the Latin alphabet in native and naturalized words, many other languages using the same alphabet do not. Pangram writers in these languages are forced to choose between only using those letters found in native words or incorporating exotic loanwords into their pangrams. Some words, such as the Gaelic-derived whisk(e)y, which has been borrowed by many languages and uses the letters k, w and y, are a frequent fixture of many foreign pangrams.

There are also languages that use other Latin characters that do not appear in the traditional 26 letters of the Latin alphabet. This differs further from English pangrams, with letters such as c, \ddot{a} , and \ddot{s} .

Azerbaijani

Zəfər, jaketini də papağını da götür, bu axşam hava çox soyuq olacaq. ("Zafar, take your jacket and cap, it will be very cold tonight")

Gecə ürəyiyumşaq əjdaha paxıl ovçunun tüfəngini söküb kağıza bükdü. ("At the night kind dragon wrapped in paper the rifle of the envious hunter"). [5]

Czech

Příliš žluťoučký kůň úpěl ďábelské ódy. ("A horse that was too yellow moaned devilish odes") is the most commonly used one, especially to test alphabet support with fonts. This sentence includes all Czech letters with diacritics, but not all basic letters. To include all basic letters, including letters that only occur in loanwords (*g*, *q*, *w*, *x*), this one is used: *Nechť již hříšné saxofony ďáblů rozezvučí síň úděsnými tóny waltzu, tanga a quickstepu.* ("May the sinful saxophones of devils echo through the hall with dreadful melodies of waltz, tango and quickstep.").

Danish

Dutch

Pa's wijze lynx bezag vroom het fikse aquaduct. ("Dad's wise lynx piously looked at the sizable aqueduct.")

Esperanto

Eble ĉiu kvazaŭ-deca fuŝĥoraĵo ĝojigos homtipon. ("Maybe every quasi-fitting bungle-choir makes a human type happy.")

Laŭ Ludoviko Zamenhof bongustas freŝa ĉeĥa manĝaĵo kun spicoj. ("According to Ludwig Zamenhof, fresh Czech food with spices tastes good.")

Eĥoŝanĝoj ĉiuĵaŭde. ("Echo-changes every Thursday"). Doesn't contain every letter but contains all accented letters.

Estonian

See väike mölder jõuab rongile hüpata. ("This little miller can jump on a train"). An imperfect pangram not using any of the special letters used in Estonian only for foreign words (c, f, q, š, z, ž, w, x, y).

Põdur Zagrebi tšellomängija-följetonist Ciqo külmetas kehvas garaažis. ("The puny cellist-feuilletonist Ciqo from Zagreb was freezing in a dreadful garage.") An imperfect pangram not using some of the special letters used in Estonian only for foreign words (w, x, y)

Ewe

"Dzigbe zã nyuie na wò, ɣeyiɣi didi aqee nye sia no see, ɣeyiɣi aqee nye sia tso esime míeyi suku", "Ddɔ nyui, ɛ nytefe, míagakpɔ wò ake wuieve kele v heda kpedeŋu". ("Have a nice birthday tonight, it's been a long time no see, it's been a while since we were in school. Good afternoon, yes, see you again at twelve o'clock in the morning.") is a two-part pangram consisting of a statement and response.

Finnish

Törkylempijävongahdus. (Although difficult to translate because of its non-practical use, it roughly means "a whinge of a sleazy lover".) A perfect pangram not using any of the special letters used in Finnish only for foreign words $(b, c, f, q, \check{s}, w, x, z, \check{z}, \mathring{a})$.

Albert osti fagotin ja töräytti puhkuvan melodian. ("Albert bought a bassoon and blew a puffing tune"). An imperfect pangram not using some of the special letters used in Finnish only for foreign words (q, w, x, z, å) but which makes perfect everyday sense.

On sangen hauskaa, että polkupyörä on maanteiden jokapäiväinen ilmiö. ("It is rather fun that bicycles are a daily phenomenon on the countryroads.") An imperfect pangram not containing the previously mentioned special letters.

Wieniläinen siouxia puhuva ökyzombi diggaa Åsan roquefort-tacoja ("Viennese rich zombie who can speak Sioux likes Åsa's Roquefort tacos") contains all the letters of the Finnish alphabet.

French

Portez ce vieux whisky au juge blond qui fume ("Take this old whisky to the blond judge who is smoking") uses each basic consonant once, though not any letters with diacritics.

German

Victor jagt zwölf Boxkämpfer quer über den großen Sylter Deich ("Victor chases twelve boxers across the Great Levee of Sylt") contains all letters, including the umlauted vowels $(\ddot{a}, \ddot{o}, \ddot{u})$ and \rat{B} . The letter y is limited to loanwords and proper names like Sylt. [a]

Hungarian

Egy hűtlen vejét fülöncsípő, dühös mexikói úr ázik Quitóban. ("An unfaithful son-in-law is being treated by a sniveling, angry Mexican lord in Quito.") contains all 44 letters of the Hungarian alphabet, with a total of 50 letters.

Egy hűtlen vejét fülöncsípő, dühös mexikói úr Wesselényinél mázol Quitóban. ("An unfaithful son-in-law paints by a sniveling, angry Mexican lord at Wesselényi's in Quito.") Corrected version of the previous sentence, a real pangram.

Icelandic

Kæmi ný öxi hér, ykist þjófum nú bæði víl og ádrepa. ("If a new axe were here, thieves would feel increasing deterrence and punishment") contains all 32 letters in the Icelandic alphabet including the vowels with diacritics $(\acute{a}, \acute{e}, \acute{i}, \acute{o}, \acute{u}, \acute{y},$ and $\ddot{o})$ as well as the letters \check{o} , \flat , and æ.

Indonesian

Muharjo seorang xenofobia universal yang takut pada warga jazirah, contohnya Qatar. ("Muharjo is a universal xenophobic who fears the peninsula residents, such

as Qatar.") contains all 26 letters in the Indonesian alphabet, including the foreign letters q, v and x.

Tokoh qari bonceng juru xilofon di vespanya muzawir. ("The Quran reciter figure gives the xylophone expert a ride on the tour guide's moped.") contains all 26 letters in the Indonesian alphabet. It also contains only the words that are in the Kamus Besar Bahasa Indonesia.

Irish

D'ith cat mór dubh na héisc lofa go pras ("A large black cat ate the rotten fish promptly") has 31 letters and includes all 18 letters found in native Irish words, but does not include the accented \acute{a} , \acute{i} , or \acute{u} , nor the non-accented \acute{e} .

Italian

Pranzo d'acqua fa volti sghembi ("A lunch of water makes twisted faces") has 26 letters and includes all 21 letters found in native Italian words. It does not include the five letters which are not found in any Italian words, except for some loanwords: j, k, w, y, and x.

Cantami o Diva del pelide Achille l'ira funesta. ("Sing to me, O Diva, of Achilles, son of Peleus, the raging wrath.") has 39 characters without considering any apostrophe and space. It is the Italian translation of the first verse of the Iliad and is used in Microsoft Windows operating system if the language is set to Italian (Italiano).

Kurdish

Cem vî Feqoyê pîs zêdetir ji çar gulên xweşik hebûn ("There were more than four beautiful flowers near the filthy Feqo") has 42 letters and includes all 31 letters found in Kurdish words. This pangram was created by Îrec Mêhrbexş in 2023.

Malay

Muzafar kerap sembahyang dan baca al-Quran waktu belajar di Universiti Oxford. ("Muzafar often prayed and read the Quran while studying at the University of Oxford.") contains all 26 letters in the Malay Latin alphabet.

Norwegian

Sær golfer med kølle vant sexquiz på wc i hjemby. ('strange golfplayer with club won sexquiz in hometown').

Polish

Zażółć gęślą jaźń ("Make the ego yellow with a gusle") - contains all diactrics, but not every letter and is mainly used to test font support

To test all letters used in Polish language, two perfect pangrams are most commonly used:

Pchnąć w tę łódź jeża lub ośm skrzyń fig ("Push a hedgehog or eight crates of figs in this boat") - most commonly used, perfect pangram, archaic spelling of osiem.

Mężny bądź, chroń pułk twój i sześć flag ("Be brave, protect your regiment and six flags") - another pangram in common use.

Stróż pchnął kość w quiz gędźb vel fax myjń. ("The watchman pushed the bone/dice into a quiz of the musics or a fax of the washes") - a perfect pangram containing all letters, including those used only in loan words: q, v, x. [8]

Portuguese

Ré só que vê galã sexy pôr kiwi talhado à força em baú põe juíza má em pânico. ("Lone defendant that sees a sexy hunk forcibly stuff a chopped kiwi in a trunk sets bad judge in a panic.") uses all diacritics and all 23 letters from the Portuguese alphabet (before the Orthographic Agreement of 1990; the letters k, w, and y are found mainly in loanwords). [b]

Romanian

Încă vând gem, whisky bej și tequila roz, preţ fix. ("[I'm] still selling jam, beige whisky, and pink tequila, [with a] fixed price.") contains all letters, including Romanian diacritics.: \check{a} , \hat{a} , \hat{i} , \hat{s} , and \hat{t} . The letters q, w, and y were introduced in the Romanian alphabet in 1982 with the first DOOM dictionary. They are used for loan words such as *quodlibet*, *watt*, and *yoga*. The letter k is also rarely used, mainly for names and international neologisms such as *kilogram* and *folk*. [9]

Serbian

Пъубазни фењерџија чађавог лица хоће да ми покаже штос. (A kind lamplighter with a sooty face wants to show me a prank.) Can equally be written in gajica: Ljubazni fenjerdžija čađavog lica hoće da mi pokaže štos..

Spanish

Benjamín pidió una bebida de kiwi y fresa. Noé, sin vergüenza, la más exquisita champaña del menú ("Benjamin ordered a kiwi and strawberry drink. Noah, without shame, the most exquisite champagne on the menu") uses all diacritics and the foreign letters k and w.: El veloz murciélago hindú comía feliz cardillo y kiwi. La cigüeña tocaba el saxofón detrás del palenque de paja. (The quick Indian bat was happily eating cardillo and kiwi. The stork was playing the saxophone behind the straw palenque.) contains 2 sentences and 92 letters; it's used in Microsoft Windows operating system if the language is set to Spanish (Español).

Slovak

Kŕdeľ šťastných ďatľov učí pri ústí Váhu mĺkveho koňa obhrýzať kôru a žrať čerstvé mäso. ("A flock of happy woodpeckers by the mouth of the river Váh is teaching a silent horse to nibble on bark and feed on fresh meat") contains all letters in the Slovak alphabet. It does not include the letters f, g, j, l, q, w, x, y, as well as accented vowels \acute{a} and \acute{o} .

Swedish^[10][circular reference]

Flygande bäckasiner söka hwila på mjuka tuvor ("Flying snipes seek rest on soft tussocks") is missing q, x and z. Uses archaic spellings.

Yxmördaren Julia Blomqvist på fäktning i Schweiz ("Axe killer Julia Blomqvist on fencing in Switzerland") uses the name "Julia Blomqvist" and the Swedish name for Switzerland.

Schweiz för lyxfjäder på qvist bakom ugn ("Switzerland brings luxury feather on branch behind oven") feels quite contrived. The duplicated letters spell out serif.

FAQ om Schweiz: Klöv du trång pjäxby? ("FAQ about Switzerland: Did you cleave a narrow village of ski boots?") uses the English abbreviation FAQ alongside some made-up compounds.

Yxskaftbud, ge vår WC-zonmö IQ-hjälp ("Axe-handle carrier, give our WC zone-maiden IQ support")

Gud hjälpe Zorns mö qwickt få byx av ("God help Zorn's maiden quickly get her pants off") uses both old-fashioned spelling and the dialectal form byx.

Byxfjärmat föl gick på duvshowen ("Foal without pants went to the dove show") is missing q and z.

Turkish

Pijamalı hasta yağız şoföre çabucak güvendi ("The sick person in pyjamas quickly trusted the swarthy driver") contains all of the letters in the Turkish alphabet.

Welsh

Ni pharciais fy nghas gar ffabrig pinc a'm jac codi baw hud llawn dŵr chwerw ger tŷ Mabon ar ddydd Mawrth, ond parciais fe mewn lagŵn rhydlyd ("I didn't park my least favourite pink fabric car and my magical digger full of bitter water by Mabon's house on Tuesday, but I parked it in a rusty lagoon") uses all the letters of the Welsh alphabet including the loan letter j.

Vietnamese

Trường quê em do bố của em xây kỹ nên sạch và đẹp lắm ("My countryside school is built thoroughly by my father, so it's very clean and pretty") is a more grammatically correct form of *Trường quê sạch và đẹp lắm do bố xây kĩ*, and contains all the letters and diacritics of the Vietnamese alphabet.^[11]

Other alphabetic scripts

Non-Latin alphabetic or phonetic scripts such as Greek, Armenian, and others can also have pangrams. ^[12] In some writing systems, exactly what counts as a distinct symbol can be debated. For example, many languages have accents or other diacritics, but one might count "é" and "e" as the same for pangrams. A similar problem arises for older English orthography that includes the long s ("ſ").

Arabic

iwise text with a انص حکیم له سر قاطع وذو شأن عظیم مکتوب علی ثوب أخضر ومغلف بجلد أزرق (wise text with a decisive secret and great significance, written on a green cloth and wrapped in blue leather")

Armenian

Չին ֆիզիկոսը օճառաջուր ցողելով բժշկում է հայ գնդապետի փքված ձախ թևը։ ("The Chinese physicist treats the swollen left arm of the Armenian colonel by spraying it with soapwater").

Belarusian

У Іўі худы жвавы чорт у зялёнай камізэльцы пабег пад'есці фаршу з юшкай ("In Ivy, a thin, lively devil in a green vest ran to eat minced meat with soup"), Я жорстка заб'ю проста ў сэрца гэты расквечаны профіль, што ходзіць ля маёй хаты ("I will brutally kill this flowery profile that walks by my house straight to the heart").

Bulgarian

Под южно дърво, цъфтящо в синьо, бягаше малко пухкаво зайче ("Under a southern tree, blooming in blue, ran a little fluffy bunny"), За миг бях в чужд, скърцащ плюшен фотьойл. ("For a moment I was in an unfamiliar squeaky plush armchair."), Ах, чудна българска земьо, полюшвай цъфтящи жита! ("Oh, wonderful Bulgarian land, whirl blooming wheats!"), Я, пазачът Вальо уж бди, а скришом хапва кюфтенца зад щайгите! ("Hey, Valyo the guard is pretending to watch, but he's secretly eating meatballs behind the crates!").

Burmese

သီဟိုဠ်မှ ဉာဏ်ကြီးရှင်သည် အာယုဝဎူနဆေးညွှန်းစာကို ဇလွန်ဈေးဘေးဗာဒံပင်ထက် အဓိဋ္ဌာန်လျက် ဂဃနဏဖတ်ခဲ့သည်။ ("A wise wizard from Ceylon took on a commitment and explicitly read the recipe for the elixir of life on the almond tree beside the Zalun Market").

Georgian

გვიპყრობდა კვამლი, ჩიტებს გაჰქონდათ ჟღურტული ზეცაში, ძილს უფრთხობს ჭიქების ჯახუნი მიწებში ("We were overcome by smoke, the birds were carried away by chirping in the sky, sleep is disturbed by the clatter of glasses on the ground") contains all the letters of the Georgian alphabet.

Hebrew

שפן, גדושה בכי ("Kazakhstan is a beautiful country, full of tears."), שפן שפן ("A bunny ate some lettuce-flavored carrots, and he had enough"), איש עם זקן טס לצרפת ודג בחכה ("A man with a beard flew to France and fished with a fishing pole"), כך התרסק נפץ על גוזל קטן שדחף את צבי למים ("That's how

the explosives fell on the little chick that pushed the deer into the water"), דג סקרן שט ("A curious fish swimming in the sea is disappointed and suddenly finds a friend").

Russian

Съешь ещё этих мягких французских булок, да выпей же чаю ("Eat some more of these soft French pastries and drink some tea") is most commonly used. Its variation is used by Windows FontView. Another popular pangram is В чащах юга жил бы цитрус? Да, но фальшивый экземпляр! ("Would a citrus live in the jungles of the south? Yes, but a fake specimen!"). This pangram is used by GNOME.

Thai

นายสังฆภัณฑ์ เฮงพิทักษ์ฝั่ง ผู้เฒ่าซึ่งมีอาชีพเป็นตนขายขวด ถูกตำรวจปฏิบัติการจับฟ้องศาล ฐานลักนาฟิ้กาคุณหญิงฉัตรชฎา ฌานสมาธิ

("Mr.Sangkhaphant Hengpithakfang - an elderly man who earns a living by selling bottles - was arrested for prosecution by police because he stole Lady Chatchada Chansamat's watch.") contains all the letters in the Thai alphabet, both obsolete and non-obsolete.

Ukrainian

Схидна, ґава, їжак ще й шиплячі плазуни бігцем форсують Янцзи ("Echidna, hooded crow, hedgehog and also hissing reptiles are crossing Yangtze in a rush").

Non-alphabetic scripts

Logographic scripts, or writing systems such as Chinese that do not use an alphabet but are composed principally of logograms, cannot produce pangrams in a literal sense (or at least, not pangrams of reasonable size). The total number of signs is large and imprecisely defined, so producing a text with every possible sign is practically impossible. However, various analogies to pangrams are feasible, including traditional pangrams in a romanization.

In Japanese, although typical orthography uses kanji (logograms), pangrams can be made using every kana, or syllabic character. The Iroha is a classic example of a perfect pangram in non-Latin script.

In Chinese, the Thousand Character Classic is a 1000-character poem in which each character is used exactly once; however, it does not include all Chinese characters. The single character \vec{x} (permanence) incorporates all the basic strokes used to write Chinese characters, using each stroke exactly once, as described in the Eight Principles of Yong.

Among abugida scripts, an example of a perfect pangram is the *Hanacaraka* (hana caraka; data sawala; padha jayanya; maga bathanga) of the Javanese script, which is used to write the Javanese language in Indonesia.

Bengali

উনিশে কার্তিক রাত্র সাড়ে আট ঘটিকায় ভৈরবনিবাসী ব্যাংকের স্কুদ্র ঋণগ্রস্ত অভাবী দুঃস্থ পৌঢ় কৃষক এজাজ মিঞা হাতের কাছে ঔষধ থাকিতেও ঐ ঋণের ডরেই চোখে ঝাপসা দেথিয়া বুকের যন্ত্রণায় ঈষৎ কাঁপিয়া উঠিয়া উঠানে বিছানো ধূসর রঙের ফরাশের উপর ঢলিয়া পড়িলেন।

All 50 letters of the Bengali alphabet are present in this pangram created by Sahidul and published in *Shubach Little Mag*.

Korean

다람쥐 헌 쳇바퀴에 타고파.

Microsoft Windows uses this phrase to test Korean fonts, which uses all of the basic Hangul consonants but not all of the vowels.

키스의 고유 조건은 입술끼리 만나야 하고 특별한 기술은 필요치 않다.

정 참판 양반댁 규수 큰 교자 타고 혼례 치른 날.

These two example pangrams each use all 24 basic letters.

Sanskrit

घटाश्च शङ्खाश्च धरन्ति तोयम् । शठादिमूढा न भजन्ति सत्यम् । वराहयूथानि किलन्ति पुच्छैः । गडेष् झञ्झाः सबलं फणन्ते ॥ (Earthen pots and conches hold water. Stupid imposters don't serve the truth. Herds of pigs play with their tails. Stormy winds blow gutsily through the fences.)

Sanskrit pangrams focus on consonants alone, since, Sandhi rules make it extremely difficult to create a pangram showing vowels distinctly. The above one has been composed by Saurabh B, in the उपेन्द्रवज्ञा (Upēndravajrā) meter and contains all consonants of Classical Sanskrit.

Self-enumerating pangrams

A self-enumerating pangram is a pangrammatic autogram, or a sentence that inventories its own letters, each of which occurs at least once. The first example was produced by Rudy Kousbroek, a Dutch journalist and essayist, who publicly challenged Lee Sallows, a British recreational mathematician resident in the Netherlands, to produce an English translation of his Dutch pangram. In the sequel, Sallows built an electronic "pangram machine", that performed a systematic search among millions of candidate solutions. The machine was successful in identifying the following 'magic' translation: [13][14][15]

This pangram contains four As, one B, two Cs, one D, thirty Es, six Fs, five Gs, seven Hs, eleven Is, one J, one K, two Ls, two Ms, eighteen Ns, fifteen Os, two Ps, one Q, five Rs, twenty-seven Ss, eighteen Ts, two Us, seven Vs, eight Ws, two Xs, three Ys, & one Z.

Chris Patuzzo was able to reduce the problem of finding a self-enumerating pangram to the boolean satisfiability problem. He did this by using a made-to-order hardware description language as a stepping stone and then applied the Tseytin transformation to the resulting chip. [16][17]

Pangrams in literature

The pangram "The quick brown fox jumps over the lazy dog", and the search for a shorter pangram, are the cornerstone of the plot of the novel *Ella Minnow Pea* by Mark Dunn. [18] The search successfully comes to an end when the phrase "Pack my box with five dozen liquor jugs" is discovered (which has only 6 duplicated vowels).

The scientific paper *Cneoridium dumosum* (Nuttall) Hooker F. Collected March 26, 1960, at an Elevation of about 1450 Meters on Cerro Quemazón, 15 Miles South of Bahía de Los Angeles, Baja California, México, Apparently for a Southeastward Range Extension of Some 140 Miles has a pangrammatic title, seemingly by pure chance.