

Guidelines

At Sahaj, we strive to build high quality software that has strong aesthetics (is readable and maintainable), has extensive safety nets to safeguard quality, handles errors gracefully and works as expected, without breaking down, with varying input.

We are looking for people who can write code that has flexibility built in, by adhering to the principles of Object Oriented Development, and have the ability to deal with the real-life constraints / trade-offs while designing a system.

*It is important to note that we are not looking for a GUI and we are not assessing you on the capabilities around code required to do the I/O. **The focus is on the overall design.** So, while building a solution, it would be nicer if input to the code is provided either via unit tests or a file. Using command line (for input) can be tedious and difficult to test, so it is best avoided.*

Following is a list of things to keep in mind, before you submit your code, to ensure that your code focuses on attributes, we are looking for -

- Is behaviour of an object distinguished from its state and is the state encapsulated?
- Have you applied [SOLID principles](#) to your code?
- Have you applied principles of [YAGNI](#) and [KISS](#) (additional info [here](#))?
- Have you unit tested your code or did TDD? If you have not, we recommend you read about it and attempt it with your solution. While we do not penalise for lack of tests, it is a definite plus if you write them.
- Have you looked at basic refactoring to improve design of your code? [Here](#) are some guidelines for the same.
- Finally, and foremost, are the principles applied in a pragmatic way. Simplicity is the strongest of the trait of a piece of code. However, easily written code may not necessarily be simple code.

Problem Statement
(Average time to write a solution 6-12 hrs)

You are provided with short paragraphs (no more than 5,000 characters) of text from Wikipedia, about well known places, persons, animals, flowers etc. For each paragraph, there is a set of five questions, which can be answered by reading the paragraph. Answers are of entirely factual nature, e.g. date, number, name, etc. and will be exact substrings of the paragraph. Answers could either be one word, group of words, or a complete sentence. You are also provided with the answers to each of these questions, though they are jumbled up, separated by semicolon, and provided in no specific order. Your task is to identify, which answer corresponds to which question.

Input Format

The first line contains a short paragraph of text from Wikipedia.

Lines 2 to 6 contain a total of 5 questions.

Line 7 contains all the five answers, which are jumbled up.

Output Format

Five lines - the first line should contain the answer to the first question, second line should contain the answer to the second question, and so on and so forth.

The answer should be entirely confined to one of the possible answers, listed in the last line of the input i.e. Line 7.

Sample Input

Zebras are several species of African equids (horse family) united by their distinctive black and white stripes. Their stripes come in different patterns, unique to each individual. They are generally social animals that live in small harems to large herds. Unlike their closest relatives, horses and donkeys, zebras have never been truly domesticated. There are three species of zebras: the plains zebra, the Grévy's zebra and the mountain zebra. The plains zebra and the mountain zebra belong to the subgenus *Hippotigris*, but Grévy's zebra is the sole species of subgenus *Dolichohippus*. The latter resembles an ass, to which it is closely related, while the former two are more

horse-like. All three belong to the genus *Equus*, along with other living equids. The unique stripes of zebras make them one of the animals most familiar to people. They occur in a variety of habitats, such as grasslands, savannas, woodlands, thorny scrublands, mountains, and coastal hills. However, various anthropogenic factors have had a severe impact on zebra populations, in particular hunting for skins and habitat destruction. Grévy's zebra and the mountain zebra are endangered. While plains zebras are much more plentiful, one subspecies - the Quagga - became extinct in the late 19th century. Though there is currently a plan, called the Quagga Project, that aims to breed zebras that are phenotypically similar to the Quagga, in a process called breeding back.

Which Zebras are endangered?

What is the aim of the Quagga Project?

Which animals are some of their closest relatives?

Which are the three species of zebras?

Which subgenus do the plains zebra and the mountain zebra belong to?

subgenus *Hippotigris*; the plains zebra, the Grévy's zebra and the mountain zebra; horses and donkeys; aims to breed zebras that are phenotypically similar to the quagga; Grévy's zebra and the mountain zebra

Sample Output

Grévy's zebra and the mountain zebra

aims to breed zebras that are phenotypically similar to the quagga

horses and donkeys

the plains zebra, the Grévy's zebra and the mountain zebra

subgenus *Hippotigris*