

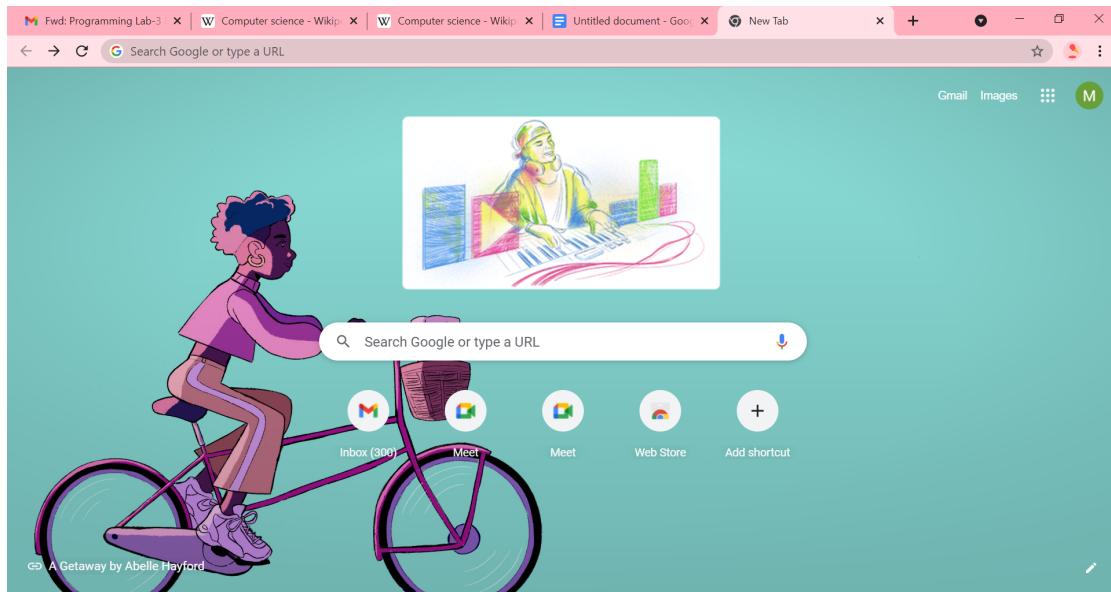
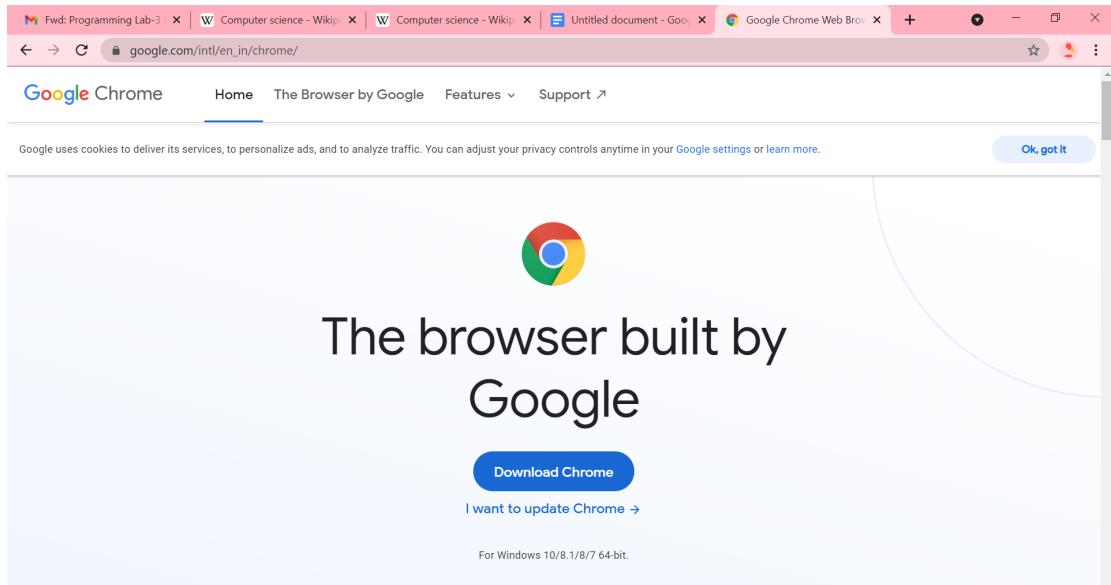
Practical No. 3

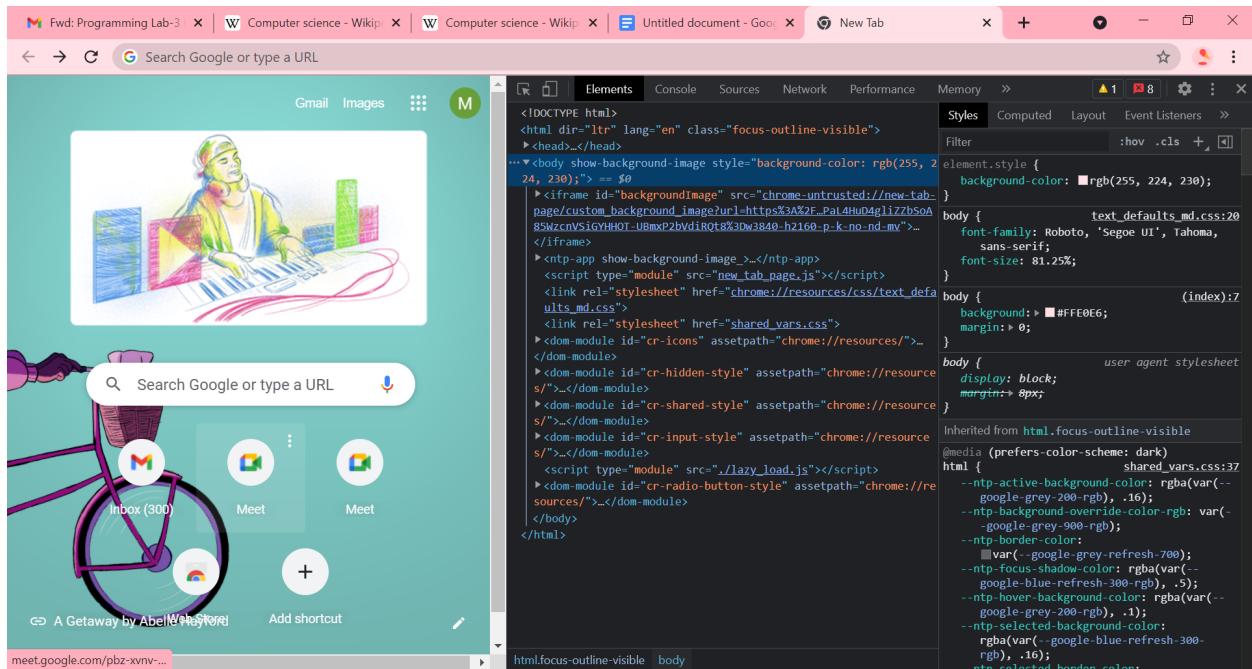
To study web browser and its Developer Tools options

Problem statement 1:

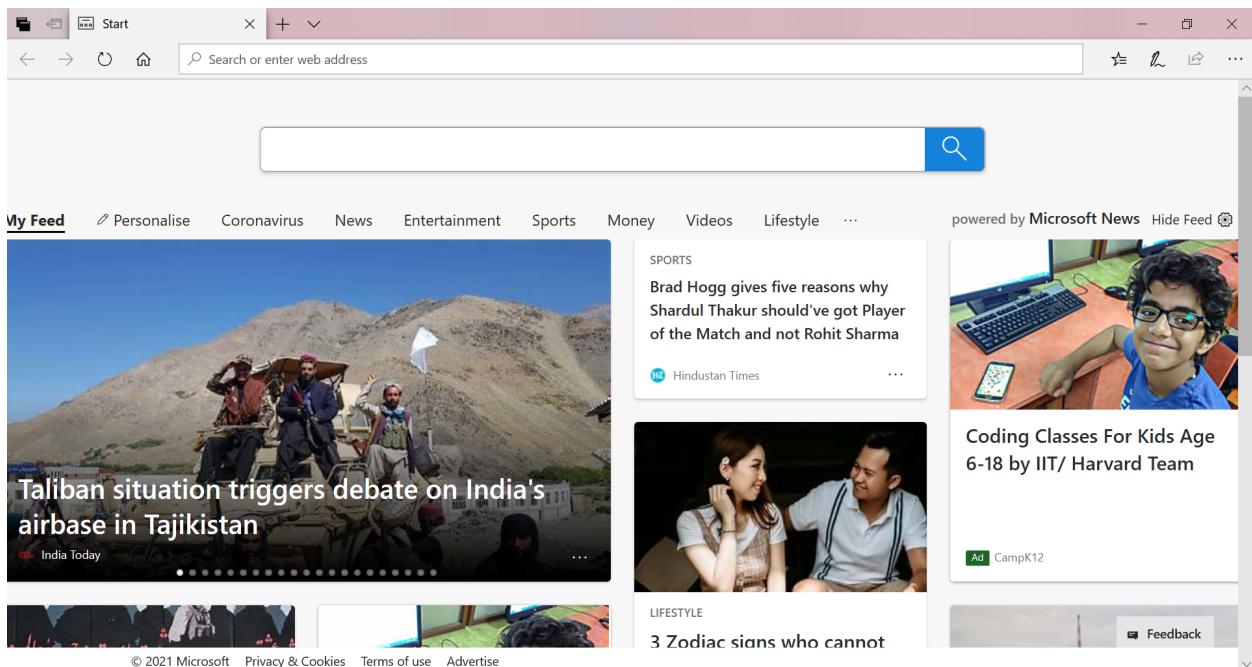
Install different web browsers on your machine. Go through the developer tools option of the browser.

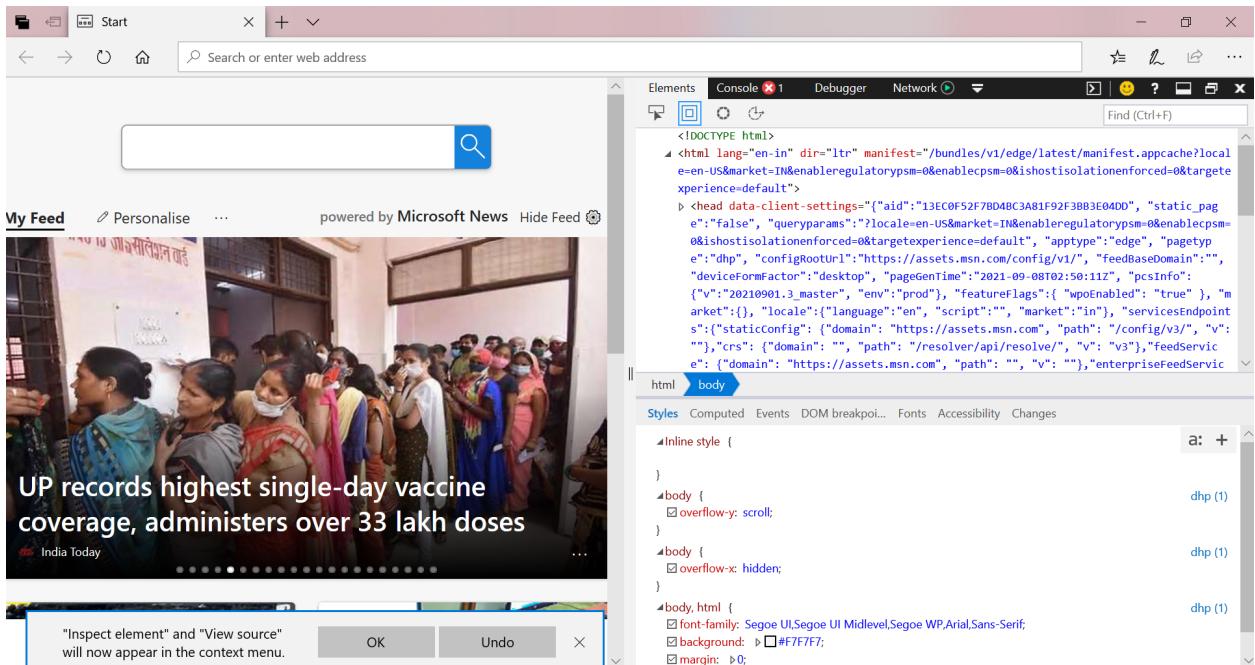
1. Google chrome





2. Microsoft Edge





Problem Statement 2:

I. Google Chrome

- Visit https://en.wikipedia.org/wiki/Computer_science on various browsers

Computer science

From Wikipedia, the free encyclopedia

For the journal, see [Computer Science \(journal\)](#). For the University Interscholastic League academic event, see [Computer Science \(UIL\)](#). "Computer sciences" redirects here. For the American corporation, see [Computer Sciences Corporation](#).

Computer science is the study of [algorithmic processes](#), [computational machines](#) and [computation](#) itself.^[1] As a discipline, computer science spans a range of topics from theoretical studies of [algorithms](#), computation and information to the practical issues of implementing computational systems in [hardware](#) and [software](#).^{[2][3]}

Its fields can be divided into theoretical and practical disciplines. For example, the [theory of computation](#) concerns abstract models of computation and general classes of problems that can be solved using them, while [computer graphics](#) or [computational geometry](#) emphasize more specific applications. [Algorithms](#) and [data structures](#) have been called the heart of computer science.^[4] [Programming language theory](#) considers approaches to the description of computational processes, while [computer programming](#) involves the use of them to create [complex systems](#). [Computer architecture](#) describes construction of computer components and computer-operated equipment. [Artificial intelligence](#) aims to synthesize goal-oriented processes such as problem-solving, decision-making, environmental adaptation, planning and learning found in humans and animals. A digital computer is capable of simulating various [information processes](#).^[5] The fundamental concern of computer science is determining what can and cannot be automated.^[6] Computer scientists usually focus on academic research. The [Turing Award](#) is generally recognized as the highest distinction in computer sciences.

Contents [hide]

1 History

Computer science

2. Using browser's Developer Tools option find out how many requests-response cycles are needed to load the page fully on your machine?

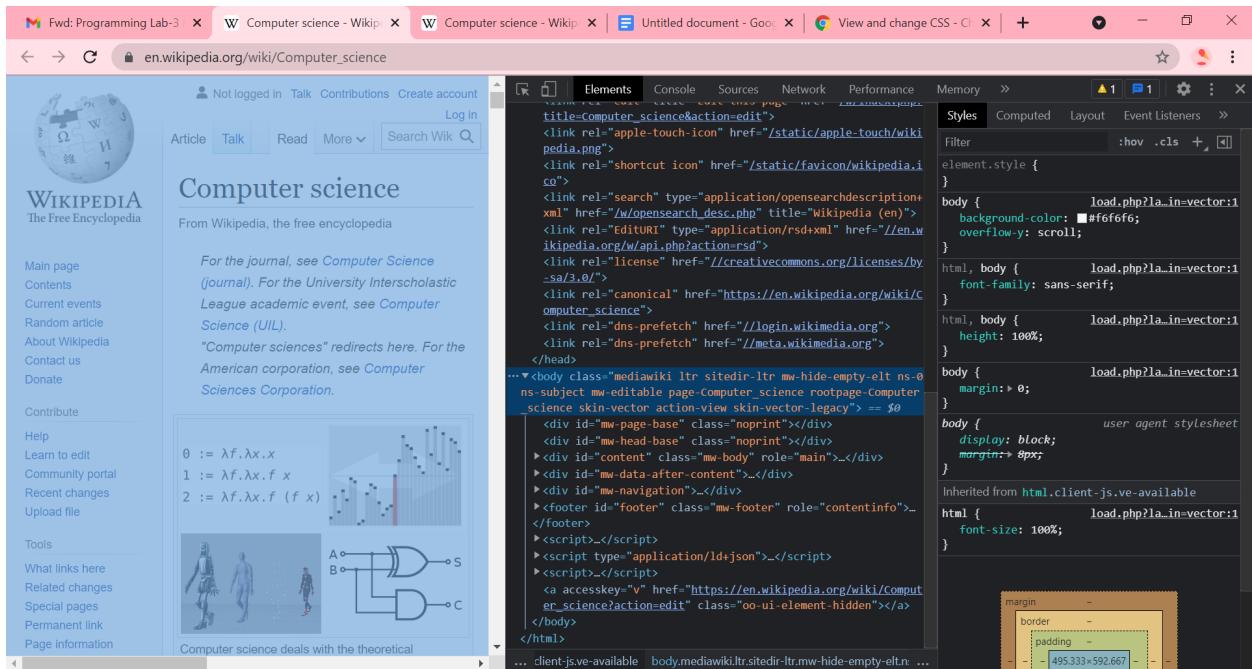
The screenshot shows a browser window with four tabs open. The active tab is 'en.wikipedia.org/wiki/Computer_science'. On the right, the developer tools Network tab is visible, showing a timeline and a list of 111 requests. The requests include the main page content ('Computer_science' at 304 ms) and numerous images and scripts related to the page's content.

111 Request-Response Cycles.

3. Using the browser's Developer Tools option get the header information of the page.

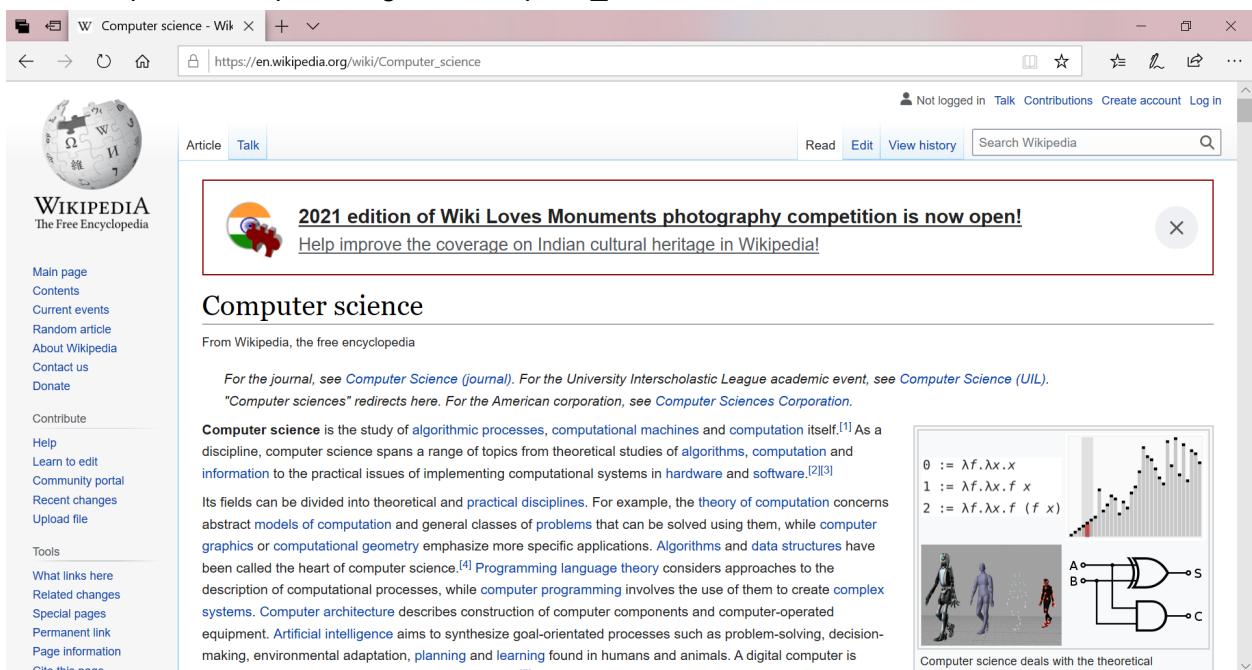
The screenshot shows the developer tools Network tab with the Headers section expanded. It displays the request URL, method, status code, remote address, and referer policy. The response headers section is also expanded, showing standard HTTP headers like Content-Type, Content-Length, and Date.

4. Using browser's Developer Tools option go through the DOM, CSS editor and JavaScript debugger options.

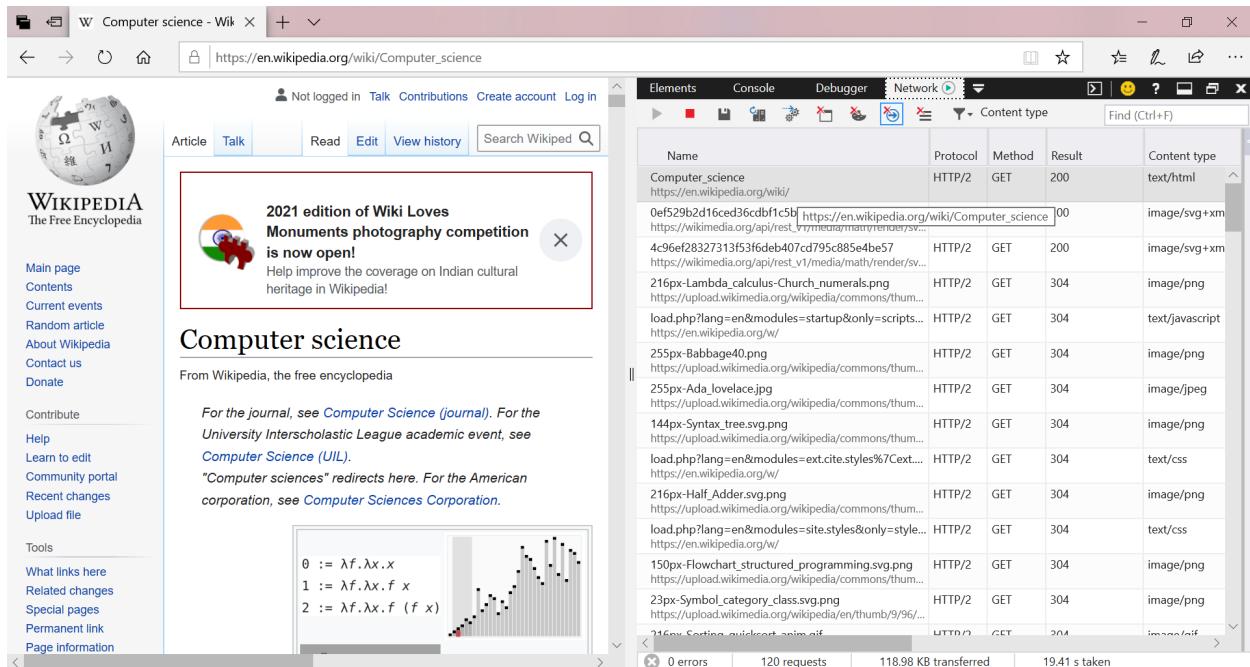


II. Microsoft Edge

1. Visit https://en.wikipedia.org/wiki/Computer_science on various browsers.



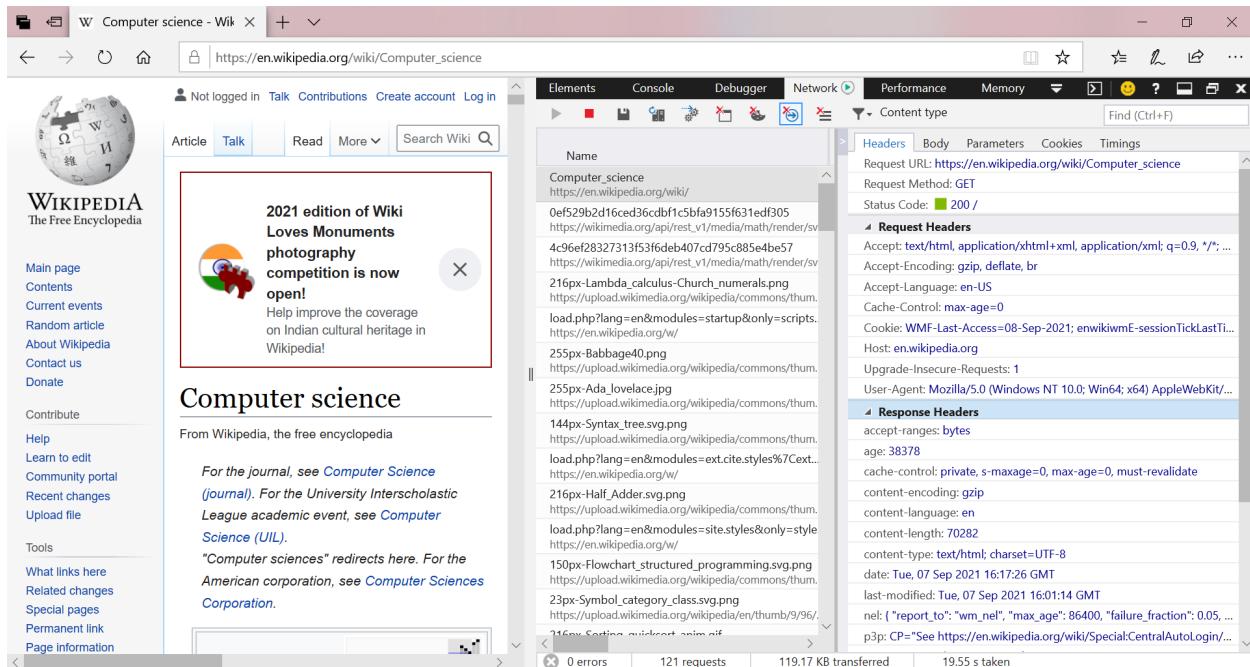
2. Using browser's Developer Tools option find out how many requests-response cycles are needed to load the page fully on your machine?



The screenshot shows the Microsoft Edge browser window with the developer tools open, specifically the Network tab. The main content area displays the Wikipedia article on Computer science. The developer tools show a list of 120 requests made during the page load. The requests include various assets like images, CSS files, and JavaScript files, all originating from <https://en.wikipedia.org>. The Network tab also shows the total transferred data as 118.98 KB and the time taken as 19.41 s.

120 Request-Response Cycles.

3. Using the browser's Developer Tools option, get the header information of the page.



The screenshot shows the Microsoft Edge browser window with the developer tools open, specifically the Network tab. The main content area displays the Wikipedia article on Computer science. The developer tools show a list of requests, with the Headers section expanded for the first request. The Headers tab displays various HTTP headers such as Accept, Accept-Encoding, Accept-Language, Cache-Control, Cookie, Host, Upgrade-Insecure-Requests, User-Agent, and Response Headers like accept-ranges, age, cache-control, content-encoding, content-language, content-length, content-type, date, last-modified, ngl, and p3p. The Network tab also shows the total transferred data as 119.17 KB and the time taken as 19.55 s.

4. Using browser's Developer Tools option go through the DOM, CSS editor and JavaScript debugger options.

