

1. State whether the following statements are true or false:

1. IP stands for Internet Protocol.
2. Every computer on the internet has the same IP address.
3. An IP address is a string of three numbers separated by full stops.
4. Some devices on the internet do not have an IP address.
5. A website can contain only one web page.
6. Websites stored on computers not connected to the internet can be viewed by everyone.
7. Each computer on the internet has a unique IP address.
8. A website can be accessed by typing its URL into the address bar of a browser.
9. A URL usually consists of letters.
10. A URL must be converted to an IP address before it can be accessed.

2. Answer the following.

11. Think about how your home address has different parts: house number, street, city, and zip code.

i) If you only had one part of the address, is it possible for someone find your house? What will happen?

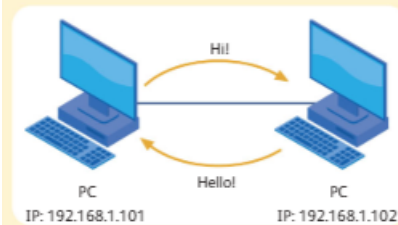
If you only had one part of your address, like just the house number or just the city, it would be very hard for someone to find your house.

ii) An IP address is like an address for a computer, explain what is IP address?

To make this possible, each device connected to the internet is assigned a unique **IP address**. The IP address identifies the device on the network and on the internet.

An IP address has a similar role to your home address – it allows website, emails, and all other data to be delivered to your device.

An IP address consists of a string of four numbers separated by full stops. An example address is: **192.158.1.38**

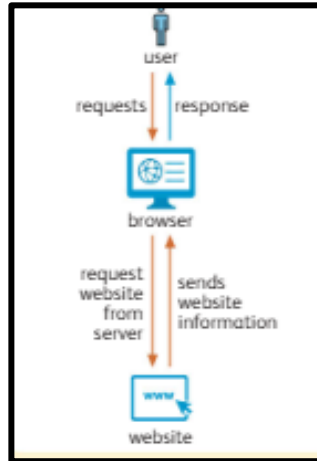


Keyword

IP address: a string of four numbers separated by full stops that identifies any device on a network. It allows devices to communicate with one another over the internet

All devices on the internet find, send and exchange information with other connected devices using their IP address.

12. Imagine you want to visit a friend. You need to know their address to get to their house. When you want to see a webpage, your computer needs the website's address (URL) to find it. Once your computer knows the address, it asks for the webpage and then shows it to you. How does having the right address help your computer find the webpage by explaining the process of accessing the webpage.



Accessing a website

- 1 After a user types a URL, such as <https://www.hoddereducation.co.uk/>, into the browser and presses enter, the browser has to find the server on the internet that stores the website.
- 2 The browser sends the request to the router.
- 3 The router converts the URL into an IP address.
- 4 The request travels across the internet until it reaches a website server with the correct IP address.
- 5 The website server receives the request and sends a copy of the web page code to your browser to display.
- 6 Your web browser displays the page on your screen.