**Advanced Security – Lab 1 Questions 1 and 2**

**Question one:**

The first way I would make my browser more secure is by downloading browser extensions such as ad blockers, this extension blocks a lot of harmful pop up adds which try to redirect you to harmful web sites and web applications. There are also some very good browser extensions which help to protect your privacy. These extensions block you from entering known malicious sites and can also block cookies and block sites form getting access of your IP address. One can also go into there browser settings and manage cookies manually for extra privacy.

There are two main applications I would download to show me who is tracking me on my browser. The first one being ‘Disconnect’ this is a browser extension which visually shows you which websites are actively tracking you in real time. I find this a very useful application as it has an easy-to-use UI and shows you exactly what websites are trying to track you. The second application is called badger and is made by EFF. Badger also monitors third party sites and cookies which are trying to your your browser and shows you them. It can also auto block them.

The reason why people are tracked online is simply to gather information on the user and send them targeted adds and recommended items to buy etc. The reason this is bad is because companies can manipulate you and often change the price of items. Your newsfeed is also changed which can be dangerous as you are only reading targeted news articles.

As I mentioned before applications such as ad blockers, Disconnect and badger can stop a lot of tracking, but I don’t believe you can ever be fully of the grid and tracked by nothing. Because some sites require you to turn of ad blockers and such to gain access. So my answer is no I don’t think you can ever be fully secure using a browser

**Question two:**

Why is it called the deep web? Also known as the hidden web or the invisible web is called this because its unidentifiable by search engines. Websites in the deep web are usually concealed behind passwords or other security walls making them unidentifiable to the search engine. There is no visible links for the search engine to find some of these sites.

How can you reach the deep web? Simply put you can access the deep web if you know the web address of a site in the deep web. These can be found purpose-built search engines such as torch or Ahmia, by finding dedicated surface web pages which have web address for sites on the dark or by word of mouth.

Are there any tools for reaching the deep web? As mentioned before there are purpose-built browsers which allow you to access the deep web, such as Ahmia and torch

What are the dangers of using or accessing the deep web? From the research I have done it seems like the deep web is pretty safe once you’re not entering personal data into sites and staying clear of websites which are well known or are known to be dangers sites.

Is it legal to use the deep web? Yes, it is legal to browse the deep web

How much of the web is in the deep web? Approximately 90% of the web is in the deep web.