

Data Level Protection 1

Task 1

(a) What is a firewall?

(b) Firewalls can be both hardware and software. But what is the difference between these two?

Explain the difference between a hardware and software firewall and how they protect our IT systems in different ways.

Hardware firewall _____

Software firewall _____

(c) In the area below draw an annotated diagram showing how a hardware firewall works.

Task 2

(a) What is anti-virus software?

(b) What is the difference between signature detection and heuristic detection? Which do you think would more accurately detect viruses?

(c) Below are three statements regarding anti-virus software. Identify which of these statements are true and which are false.

	True	False
1. Anti-virus software can only detect viruses, not other forms of malware like worms.	<input type="checkbox"/>	<input type="checkbox"/>
2. Anti-virus software must be regularly updated, otherwise it won't detect some malware.	<input type="checkbox"/>	<input type="checkbox"/>
3. Anti-virus software is very expensive and not affordable to the average user.	<input type="checkbox"/>	<input type="checkbox"/>

Task 3

(a) Below is a drawing of a sign-in form for a website. Annotate this document to identify features of the interface design that can improve security.



(b) For each of the features identified above identify a threat that they might be able to protect us from being harmed by.

1. _____
2. _____

(c) Autocomplete is an interface design feature that can improve security. However, it could potentially be a security issue. Explain below why autocomplete may negatively impact on security.
