

# Keeping personal data secure



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# 1. Personal data & Passwords

## Reminder

**Personal data** Information that relates to an identified or identifiable individual

### Section 1.1 (recall)

- 1) Which of these pieces of data are personal that would need to be protected?

Data item	Yes/No
Gender	
Telephone number	
WhatsApp message	
Twitter post	
Your health records	
Newspaper article about you	

- 2) Fill in the missing words for this definition of a strong password

Combination of letters, numbers and  that are difficult to guess by a person or

### Section 1.2 (define)

- 3) Why is securing your personal data important? Please give at least 2 reasons.

- 4) What is a benefit of using a password manager?

### Section 1.3 (apply)

- 5) Using a password strength testing website such as those below, find out how long these passwords would take it crack.

[passwordmonster.com](https://passwordmonster.com)

[security.org/how-secure-is-my-password/](https://security.org/how-secure-is-my-password/)

[uic.edu/apps/strong-password/](https://uic.edu/apps/strong-password/)

Password	Time to crack
password1	
\$cotland09	
window.white.heart*	
d\$f!dfgh&&loc	
srntyvminsowahh	
mypasswordisgood	

## 1. Personal data & Passwords

- 6) Using a password generator, create a password that fits with the criteria. Then check how long they would take to crack.

[passwordsgenerator.net](https://passwordsgenerator.net)

[lastpass.com/features/password-generator](https://lastpass.com/features/password-generator)

[my.norton.com/extspa/passwordmanager](https://my.norton.com/extspa/passwordmanager)

Criteria	Password	Time to crack
At least 10 characters, mix of numbers and lower case letters		
At least 12 characters, mix of lower and upper case letters		
At least 8 characters, mix of numbers, letters and symbols		
A password you use for an online account (please do not write your password within this workbook)		

### Section 1.4 (active)

- 7) Thinking about your 'keeping personal data secure' score. What could you do to improve your password related scores?

Area	Your Score	Plan to improve
Strong password		
Password manager		

## 2. Multi-factor authentication

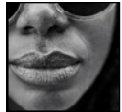
### Reminder

**Multi-factor authentication** Two or more pieces of information are required to gain access to an account

### Section 2.1 (recall)

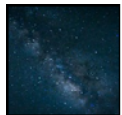
1) Why is it best practise to use multi-factor authentication (MFA) when accessing accounts online?

2) Which of these can be used to prove your identity when accessing an online account?



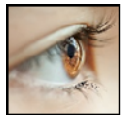
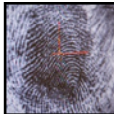
Face  
recognition

Authentication  
apps



Star sign

Fingerprint



Eye colour



3) Can you group these ways of proving your identity into, something you know, something you have and something you are?

Email address

Use authenticator app

Enter code on phone

Finger print

Bank card PIN

Password

Something you know

Something you have

Something you are

## 2. Multi-factor authentication

### Section 2.2 (rephase)

- 4) Using biometrics such as fingerprints and facial recognition can be a convenient way of users accessing information, however they are not fool proof. What issues could you come across when using biometrics?

### Section 2.3 (active)

- 5) There are many Multi-factor authentication apps available to use. By searching online, find 3 MFA apps that are available and how much they would cost to use.

Name	Cost

- 6) Thinking about an online account you have (e.g Facebook, Twitter), search online to find out how to set up Multi-factor authentication (sometimes called 2-step authentication) for your account and paste a link to the website below.

Online account provider (e.g. Facebook)

Link to instructions

- 7) Thinking about your 'keeping personal data secure' score. What could you do to improve your MFA score?

Area	Your Score	Plan to improve
Multi-factor authentication		

### 3. Keeping your device secure

#### Section 3.1

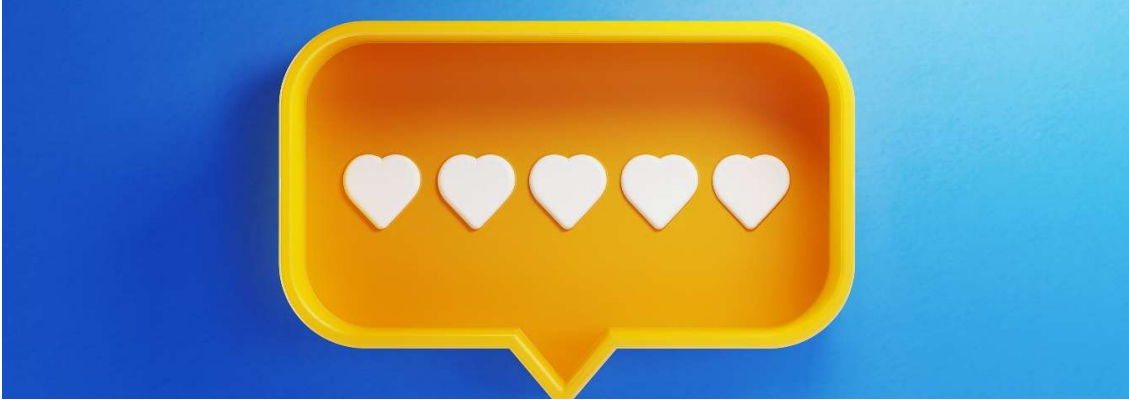
Below is an article from May 2000, that reports on what is often described as the worst computer virus ever. It was known as the ILOVEYOU worm.

**Read over the article, then answer the questions below.**

Source: BBC technology website <http://news.bbc.co.uk/1/hi/uk/736080.stm>

#### 'Love Bug' bites UK

Published 4 May 2000



"A computer virus that carries the message "ILOVEYOU" is disabling computer networks across the UK. One estimate says up to 10% of UK businesses have been hit by the bug, which is also being transmitted around the world.

The e-mails have raced across the country, reaching the NHS, universities, City of London institutions, and many large and small companies.

BT, Vodafone, Barclays, Scottish Power and Ford UK were among the giant firms affected.

A spokesman for Lloyds of London insurers said the cost could easily run into tens of millions of pounds in the UK alone.

Even the House of Commons was cut off from electronic communication with the outside world, as the network was shut down to prevent the bug spreading.

It is believed the virus is programmed to delete some computer files, including MP3 music files and images, as well as raiding email addresses to multiply itself and send itself and other e-mails onwards."

- 1) What can you do to reduce the risk of your computer or phone being attacked by malware such as the ILOVEYOU worm in the future?

### 3. Keeping your device secure

#### Section 3.1

- 2) Ransomware is a type of malware that holds data and computers hostage until a ransom is paid. By searching online, find the names and descriptions of 3 different ransomware virus attacks.

Name	Description

Here are some websites might help research ransomware attacks.

<https://www.upguard.com/blog/ransomware-examples>

<https://securityscorecard.com/blog/ten-examples-of-recent-and-impactful-ransomware-attacks>

<https://www.bbc.co.uk/news/technology-56933733>

- 3) There are many providers of anti-virus software available to use. By searching online, find 3 anti-virus software packages that are available and how much they would cost to use.

Name	Cost

- 4) Thinking about your 'keeping personal data secure' score. What could you do to improve these scores?

Area	Your Score	Plan to improve
Anti-virus		
Firewall		

## 4. Protecting your data online

### Section 4.1 (recall)

- 1) Fill in the missing words for this definition of a VPN

A VPN sends information via an  connection to a remote server before accessing the internet.

- 2) What are some benefits of using a VPN?

### Section 4.2 (rephase)

- 3) Why does connecting your device to a public wifi hotspot put you at greater risk of being hacked?

- 4) You are looking through your social media feed and see this link to a quiz to find out what animal you are most like. What do you need to think about before entering any personal information into this quiz?



### Fun Animal Quizzes

Quiz: What animal are you?  
Like it, share it and let us know your results!  
[www.animalquiz.com](http://www.animalquiz.com)



## 4. Protecting your data online

### Section 4.3 (active)

- 4) Using a search engine such as Google, search for your own name. Did you appear on many websites? Were there any images of you? Were you surprised by what you could see?