ANSWERS

F12.2 Personal data and privacy

Technology and society · GCSE · OCR J277 1.6.1, AQA 8525 3.8, Edexcel 1CP2 5.2.1 · about 15 min

What this lesson is about

What personal data is, the Data Protection Act 2018, and anonymising a log.

- What counts as personal data?
- The Data Protection Act 2018
- Data minimisation in a program
- Anonymising

Questions

6 marks in all

1. Which of these is personal data? [1 mark]

- ☐ **A** A student's school email address
- ☐ **B** The number of robots in a room
- ☐ **C** The speed of a motor
- ☐ **D** The colour of a mat

> **Answer:** A. It identifies a living person.

2. Which law protects personal data in the UK? [1 mark]

- ☐ **A** The Data Protection Act 2018
- ☐ **B** The Computer Misuse Act 1990
- ☐ **C** The Copyright, Designs and Patents Act 1988
- ☐ **D** The Freedom of Information Act 2000

> **Answer:** A. It works alongside the UK GDPR, and together they set the rules for anyone holding personal data.

3. What does data minimisation mean? [1 mark]

- ☐ **A** Collect only the data you actually need
- ☐ **B** Compress the data
- ☐ **C** Delete all the data at once
- ☐ **D** Store data on the smallest disk

> **Answer:** A. The data you never collect cannot leak.

4. Which is a right people have over their own data? [1 mark]

- ☐ **A** To see what is held about them and have mistakes corrected
- ☐ **B** To see everyone else's data
- ☐ **C** To be paid for it
- ☐ **D** To stop the company trading

> **Answer:** A. Access and rectification are two of the rights in the Act.

5. A school keeps robot logs with names for ten years. Which principle does this break? [1 mark]

- ☐ **A** Kept no longer than needed
- ☐ **B** Accuracy
- ☐ **C** Lawfulness
- ☐ **D** Security

> **Answer:** A. Data must be deleted once the reason for holding it has gone.

6. What does this program print? [1 mark]

```
rows = [('Sam', 240), ('Ava', 180)]
for n, (name, cm) in enumerate(rows, start=1):
    print(f'student {n}: {cm} cm')
```

> **Answer:**
>
> ```
> student 1: 240 cm
> student 2: 180 cm
> ```
>
> The names are replaced by numbers.

The task: anonymise the log

Each row of `log` is a name, an email and a distance in centimetres. Print an anonymised line for each, in the form `student 1: 240 cm`, numbering the students from 1 in the order they appear. Then print `records: <n>` and `total: <n> cm`. Nothing in the output may contain a name or an email.

```
# the two lines every program starts with: the commands, then the robot
from bugbot import *
connect()

# name, email, distance in cm
log = [
    ("Sam Patel", "sam@school.uk", 240),
    ("Ava Ng", "ava@school.uk", 180),
    ("Jo Reilly", "jo@school.uk", 95),
    ("Kit Hale", "kit@school.uk", 310),
]
```

The hint students can ask for: Number the students as you walk the list, printing only the number and the distance. Keep a running total of the distances, and the number of records is the length of the list.

A solution

```
from bugbot import *
connect()
log = [
    ("Sam Patel", "sam@school.uk", 240),
    ("Ava Ng", "ava@school.uk", 180),
    ("Jo Reilly", "jo@school.uk", 95),
    ("Kit Hale", "kit@school.uk", 310),
]
total = 0
for n, (name, email, cm) in enumerate(log, start=1):
    print(f"student {n}: {cm} cm")
    total = total + cm
print("records:", len(log))
print("total:", total, "cm")
```

Any program that meets the task's checks is marked correct in the simulator; this is one way, not the only way.