# Binary Files Exercises

#### Binary Files

- Write down a statement that opens an output file stream in binary mode
- Why are the << and >> operators not suitable for use with binary files?
- What should we use instead of these operators?

#### Binary File Structure

- Binary files usually have some kind of internal structure which makes the data meaningful
- If we need to work with a binary file which has a particular format, such as .jpg or .zip, what is the best way to achieve this?

## Memory Alignment

- What does it mean for data to be "word aligned"?
- Why is word alignment important?

### Padding

- What is meant by "padding"?
- Why does padding cause problems when working with binary files?

#### #pragma pack

- What does #pragma pack mean?
- Why is #pragma pack helpful when working with binary files?

## alignas

- What is the alignas keyword?
- Why is alignas not always helpful when working with binary files?