Unit 23　*Program design*

1 Warm-up

A　In pairs, try to think of an answer for the question:

What is programming?

Look at the definition in the Glossary. Is it similar to yours?

B　Complete the following definitions with the words and phrases in the box.

> the various parts of the program　　may occur in programs　　language
> binary numbers　　　a given problem

1　**algorithm**
The step-by-step specification of how to reach the solution to ....

2　**flowchart**
A diagram representing the logical sequence between ....

3　**coding**
The translation of the logical steps into a programming ....

4　**machine code**
The basic instructions understood by computers. The processor operates on codes which consist of ....

5　**debugging**
The techniques of detecting, diagnosing and correcting errors (or 'bugs') which

....

2 Listening

A　📻 Listen to Lucy Boyd, a software developer, explaining how a program is produced. Number these steps in the order you hear them.

☐ Provide documentation of the program.
☐ Understand the problem and plan the solution.
☐ Test and correct the program.
☐ Make a flowchart of the program.
☐ Write the instructions in coded form and compile the program.

B　📻 Listen again and take notes. Use your notes to explain what each step means.