

2.2 PROGRAMMING TECHNIQUES · 2.2.1(E)

Using an IDE

The features that help you write & debug a program. Spec 2.2.1(e).

01 What an IDE is

Def One app combining the tools to **write, run, test & debug**.

Core Editor + run/translate + debugger.

Exam Name **features**, not brands.

02 Writing aids

Highlighting Colours keywords/strings; structure clear.

Auto-complete Suggests names; fewer typos.

Auto-indent Neat block layout.

Error h/l Underlines **syntax** errors as you type.

03 Debugging aids

Breakpoint Pause at a chosen line.

Step Run **one line at a time**.

Watch See **variable values** as you step.

For **Logic** errors at run time.

04 Plus

Run Built-in translator → one-click run.

Console Run-time errors with line numbers.

Refactor Safe rename, search uses.

FINAL PASS BEFORE THE EXAM

Rapid exam tips

Six slips on IDE questions.

01

Name a **feature** (breakpoint), not a brand (Visual Studio).

02

"Describe" = feature + **what it does** for the programmer.

03

Error **highlighting** = syntax errors; **debugger** = logic errors.

04

Breakpoint → step → watch is the standard bug-hunt.

05

Watch window shows **variable values** as the program runs.

06

"Discuss" an IDE → benefits, plus a small downside, then conclude.