Monday 8th November 2021

Errors in Programs

Syntax Errors

Syntax errors occur when you do not follow the rules (or syntax) of the programming language you are using. For example, a command word has been misspelled (inport randen) or a variable is used before it is declared. Syntax errors are the easiest to find, because they are displayed by the interpreter/compiler when you start running the program.

Runtime Errors

Runtime errors occur during program execution when the processor is asked to do something impossible (eg divide by 0). They normally cause the program to crash.

Logic Errors

Logic errors are the hardest errors to find. They occur when a flaw in the program does not prevent it from running, but makes it produce an incorrect or inaccurate result. When looking for logic errors, check that

* Variables have been initialised correctly,
* The right operators have been used in expressions,
* Assignment statements (x = 2) are the right way round.