2.2 PROGRAMMING TECHNIQUES CONTINUED

SUB PROGRAMS

Procedures are a set of instructions stored under a name so that you can call the procedure to run the whole set of instructions.
A **function** is like a procedure but always returns a value.
Parameters are variables used to pass values into a function or procedure.

A procedure **with** parameters	A procedure **without** parameters

procedure intro (name)
 	
   print("Hello " +name)
 	
   print("Welcome to the game")
 	
endprocedure
	procedure intro ()
	
	   print("Hello")
	
	   print("Welcome to the game")
	
	endprocedure

SQL (Structured Query Language)

SQL is the language used to manage and search databases.

Commands	Example	What it does
SELECT FROM	SELECT name, age FROM students	Displays the name and age of everyone in the students table
WHERE	SELECT name FROM students WHERE gender=male	Displays the name of everyone in the students table who's gender is male
LIKE	SELECT name FROM students WHERE name LIKE "% Smith"	Displays the students' names that end with Smith.
AND	SELECT name FROM students WHERE gender=male AND attendance > 90	Displays the students who are male and have an attendance of more than 90.
*	SELECT * from students	Selects all of the fields from the students table

RECORDS

Records are a data structure used to store a collection of data. They can store information of different data types.
Field = each item in a record is a field.
Each field has a name and data type.

A record can be created like this:

```
record students
    int student_number
    string student_name
    bool passed_test
endrecord
```

Data can be assigned using variables:

```
Student1=students(1,"Bob Jones", True)
Student2=students(2,"Steve Smith", False)
Student3=students(3,"Sally Roberts", True)
```

The whole record can be accessed using the variable name:

```
print(Student1)
```

(1, "Bob Jones", True)

or part of a record can be accessed:

```
print(Student3.student_name)
```

Sally Roberts