



Computing (Computer Science) – Year 6

How is a computer game made?

Big Idea:

Computer games are made by people using advanced coding.

What should I already know?

- How to adapt an algorithm depending on the type of input.

What will I know by the end of this unit?

- How to use Python to code, understanding the role of 'variables' and 'functions'.
- How to design and create a game using Python code.

Python:

The screenshot shows a Python IDE interface. On the left, a code editor contains the following Python code:

```
print("Hello, World!")  
x = "Python"  
y = "is"  
z = "awesome"  
print(x, y, z)
```

On the right, a terminal window displays the output of the code:

```
Hello, World!  
Python is awesome
```

Annotations with red arrows point to specific elements:

- Print Function:** Points to the `print("Hello, World!")` line.
- Run Program:** Points to the green `Run >` button.
- Idle box where we write instructions:** Points to the code editor area.
- Output box:** Points to the terminal output.
- Variables:** Points to the lines `x = "Python"`, `y = "is"`, and `z = "awesome"`.

Key vocabulary:

Python	A computer language used to build websites and other digital content e.g. games.
Variables	The information given and changed in an algorithm on Python.
Functions	A piece of Python language that performs a specific task.
Print	The function used to type text.
If/Else	Something used in Python to alter a function's output depending whether a statement is true or false.
'For' Loops	A way of repeating a function endlessly in Python.
Range	Something used in Python to make a sequence of numbers.