# Lesson Plan 2: Selection

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| **Course:** KS3 Computing | **Session: 2** of 10 | **Date:** Jan/Feb 2018 |

**Lesson aims and outcomes**

Today we are using three new Python keywords: def, if and else

At the end of this lesson you should be able to

* write a function using def
* write programs that give different responses depending on what is typed in at the keyboard
* Know the difference between = and ==

**Teachers notes**

This lesson uses quite a bit of Predict and then quite a lot of Investigate as there are many new embedded concepts - introducing def to create a function is good practice at an early stage as can demystifies functions and prevent bad habits forming. Also with if statements it enables students to test different pathways without running the program again. There are difficult bits of syntax to master - =/== and indentation, so there are quite a few exercises to practise.

**Structure of session**

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| **Time** | **Activity** | **Resources** |
| 0- 10 mins | Arrival and settling  Do Now – students individually should look at the two examples on the board and decide what will be printed in each case. Then they should discuss in groups and come up with an answer between them (peer instruction style). Teacher to take answers from groups and then discuss misconceptions. | Do Now activity (Predict) |
| 10- 30 mins | Students should do Tasks 1 – 3 which involves Predict, Run and Investigate with an if/else example.  Go over the answers with the students | Starter program  Activity Sheet 2  Powerpoint presentation |
| 30-55 mins | Students modify the starter program and start to develop their own programs using if and else and both text and numeric input. | Activity Sheet 2 – Task 4 |
| 55-60 mins | AfL – short question on the syntax of input() | Plenary on powerpoint |