





### Introduction:

This project teaches children how to use selection (if, else and elif statements) in their programs, to alter program flow in response to data. This is achieved through writing and testing a simple quiz program, which includes written text and multiple choice responses.

#### Resources

For this project, Python will need to be installed. It is recommended that version 3.2 of Python is installed.

Children can also make use of the materials which accompany this project. Files included in the 'Project Resources' folder (found under the 'Download Project Materials' link):

Quiz.py

Make sure that each child has read and write access to their own copy of these resources.

# Learning Objectives

- · Selection, using:
  - o if;
  - o else;
  - o elif.
- · Program testing and problem solving.

## Challenges

- Question time using if and else to give quiz answer feedback;
- Fixing your quiz use of the .lower() method to reduce errors in answer feedback;
- Multiple choice quiz using elif to add multiple choice quiz questions;
- Keeping score addition of a score variable to track progress;
- How did I do? further use of if and else statements to provide an end of quiz message, based on their score.

## Frequently Asked Questions

• As the player's input is stored as text, any questions with a numerical answer should also be represented as text. For example:

```
if answer == "4":
...
```

and not:

```
if answer == 4:
...
```

As an alternative, it is also possible to cast the player's answer to a number, and then compare the two numbers:

```
answer = int(answer)

if answer == 4:
...
```

- Each if / else / elif statement should end with a colon.
- The body of each if / else / elif statement should be uniformly indented. It is recommended that the Tab key is used for this, as it makes indentation mistakes easier to spot. For example, the following program will not run:

```
if answer == "variable":
    print("Well done")
    print("------")
    print(":) ")
)
```

• Children should remember the difference between = (used for variable assignment) and == (used for checking equality).

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