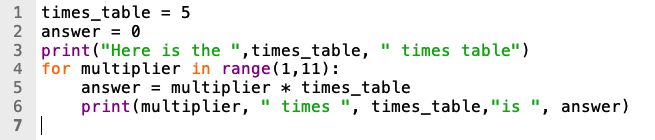
**Handout 1: For Loop Programming Activity**

**Activity 1**

Look at the code that has been shared with you



**Predict**

In the box predict what you think the code will do when run

|  |
| --- |
| It will print out the 5 times table. It will start at 1 and go through to ten. |

**Run**

Now run the code, what did it do?

|  |
| --- |
| Prints out 5 times table 1 to 10 |

**Investigate**

In the box predict what you think the code will do when run

1. Line 6 is used to output the times table message on the screen. In the first iteration, what is the value of the variable multiplier?

|  |
| --- |
| 1 |

2. What does the \* symbol mean on Line 5

|  |
| --- |
| Multiply |

3. What happens to the value of the multiplier after each iteration?

|  |
| --- |
| Increments by 1 |

4. Change the values to range(2,22). What happens?

|  |
| --- |
| Prints from 2 to 22 X 5. |

**Activity 2**

**Modify**

Using the code make the modifications below. run it after each task to make sure it works

1. Change the code so that it displays the timetable up to 12x
2. Add a feature to ask the user what times table they want to display. e.g. if they enter 9, it should display 1x9=, 2x9=18……up to 12x9
3. Add to your solution by asking the user to also input how big they want their times table e.g if they enter 9 for the times table and 3 for the size they get 1x9=9, 2x9=18, 3x9=27

[Link to a solution](https://trinket.io/python3/be0cf2cba8) - Note this is written in procedures. Don’t worry if your code wasn’t written in procedures.

**Make**

Taking what you have learnt so far tackle this new problem

Create a quiz that tests a player’s knowledge of their times tables. The program should:

* Ask the user which times table they would like to test
* Ask the maximum value they would like to go to
* Go through each multiplication in turn and ask for the correct answer
* If the player is correct, then “correct” should be displayed
* Else, “incorrect” should be displayed

**Challenge** level - if you get that finished, add a feature that keeps the score

[Link to a solution](https://trinket.io/python3/f9f16ca8aa) - Note the code here is written with a try. You aren’t expected to know how to use them for your exams.