



## While Loops Homework

### Question 1

In your own words explain the difference between a while and for loop. Give one example of when you would want to use a while loop over a for loop.

### Question 2

For this question you need to type out what the output is from the code given to you below. Remember that the output is the text that appears in the black section at the bottom of your Processing screen. You should be able to do this without typing and running the code.

```
x = 0
y = "Hello"
z = 1
while x <= 10:
    print(y)
    y = y + "h"
    x = x + z
    z = z + 1
```

### Question 3

Explain what an infinite loop is and give one example by typing out some code.

### Question 4

The following is a for loop that prints the numbers from 0 to 10. Your goal is to write a while loop that is also able to print the number from 0 to 10 but this time it needs to be in reversed order so from 10 to 0.

```
for number in range(0, 11):
    print(number)
```