While loops

No.	Title	Description	Completed	Play
1	Add Numbers	Create a function addNumbers(x) that takes a number as an argument and adds all the integers between 1 and the number (inclusive) and returns the total number.	✔	▶
2	Add Numbers II	Create a function addNumbers(start, end) that adds all the integers between the **start** and **end** value (inclusive) and returns the total sum.	✔	▶
3	[MCQ] Using 'break' in 'while' loop	The 'break' statement can be used to terminate the 'while' loop.	✔	▶
4	Count pages in a book	Create a function countPages(x) that takes the number of pages of a book as an argument and counts the number of times the digit '1' appears in the page number.	✔	▶
5	[MCQ] Using 'break' in 'while' loop	The 'break' statement can be used to terminate the 'while' loop.	✔	▶
6	Factorial(n)	Create a function factorial(x) that takes an integer and returns the product of all the positive integers less than or equal to n.	✔	▶
7	Double Factorial(n)	Create a function doubleFactorial(n) that takes an odd integer and returns the product of all odd values up to the value n (where n=2k-1).	✔	▶
8	Prime Numbers	Create a function that takes in a positive integer and return a list of prime numbers. A **prime** number is only divisible by 1 and itself.	✔	▶
9	Square Root Approximation	Create a function that takes in a positive number and return 2 integers such that the number is between the squares of the 2 integers. It returns the same integer twice if the number is a square of an integer.	✔	▶
10	pi Approximation	Create a function that computes the approximation of pi, based on the number of iterations specified.	✔	▶
11	Estimate pi	Write a function estimatePi() to estimate and return the value of pi based on the formula found by an Indian Mathematician Srinivasa Ramanujan. It should use a while loop to compute the terms of the summation until the last item is smaller than 1e -15. The formula for calculating distance is given below: $$\frac{1}{\pi} = \frac{2\sqrt{2}}{9801} \sum_{k=0}^{\infty} \frac{(4k)!(1103 + 26390k)}{(k!)^4 396^{4k}}$$ where $k!$ is the factorial of k.	✔	▶
12	Prime Factorization	Given a positive integer, write a function that computes the prime factors that can be multplied together to get back the same integer.	✔	▶
13	Lowest Common Multiple	The smallest common multiple of two or more numbers is called the lowest common multiple (LCM). Given a list of integers, find the lowest common multiple.	✔	▶