Finger Exercises Lecture 4

The questions below are due on Wednesday September 21, 2022; 03:00:00 PM.

1) Question 1 of 1

Assume you are given a positive integer variable named `N`. Write a piece of Python code that finds the cube root of `N`. The code prints the cube root if `N` is a perfect cube or it prints `error` if `N` is not a perfect cube. Hint: use a loop that increments a counter -- you decide when the counter should stop.

```
1  # Write your code here


   N = int(input("Please choose an positive integer: "))

   guess_root = 0
   perfect_cube = False


   while N - guess_root**3 >= 0:
       if N == guess_root**3:
           perfect_cube = True
           break
       guess_root += 1

   if perfect_cube:
       print(f'The cube root of {N} is {guess_root}')
   else:
       print(f'{N} is not a perfect cube')
```

You have infinitely many submissions remaining.

Here is the solution we wrote:

```
i = 1
while i**3 < N:
   i +=   1
if i**3 == N:
    print(i)
else:
    print('error')
```

6.100L Introduction to CS and Programming Using Python

Fall 2022