Assignment #9

The 'while' Statement

Write definitions for each of the following Python functions, and for each function, include a clear and concise comment to describe its purpose. Use only the Python topics covered so far in class.

For practice, do not use any '`for`' statements in this assignment.

1. `FirstCubeAbove( n )`

   The smallest cube which exceeds the non-negative integer '`n`'

   ```
   FirstCubeAbove( 7 ) ⇒ 8
   FirstCubeAbove( 8 ) ⇒ 27
   ```

2. `IsPalindrome( s )`

   Does sequence '`s`' read the same forwards and backwards?

   ```
   IsPalindrome( [ 1, 2, 3, 2, 1 ] ) ⇒ True
   IsPalindrome( "rotavator" )       ⇒ True
   IsPalindrome( "" )                ⇒ True
   IsPalindrome( "abcdba" )          ⇒ False
   ```

3. `Binary( n )`

   The list of binary digits of the non-negative integer '`n`'

   ```
   Binary( 19 ) ⇒ [ 1, 0, 0, 1, 1 ]   (since 19₁₀ = 10011₂)
   Binary( 0 )  ⇒ [ 0 ]
   ```

Program Submission:

Store the function definitions in a file named '`a09.py`', and turn it in for grading by typing:

```
submit-cs1117 a09.py
```

Due Date: Fri Nov 13, 11:00am