Problem Set 2 Exercise #13: Power of Three

Reference: Lecture 4 notes

Learning objectives: Repetition statements

Estimated completion time: 30 minutes

Problem statement:

Write a program **PS2_Ex13_PowerOf3.java** that reads two positive integers *start*, *end* (1 < *start* < *end*) from user and counts how many natural numbers in the range [*start*, *end*] (both inclusive) that are power of 3. For example, there are 2 natural numbers in the range [1, 10] that are power of 3. They are: 3 and 9. Note that we disregard 3^0 which is 1.

A tip is given at the end of this page.

Sample run #1:

```
Enter start and end: 1 10
Answer = 2
```

Sample run #2:

```
Enter start and end: 3 30
Answer = 3
```

Useful tip:

A best solution uses single loop instead of nested loop.