**Edward Nafornita** 

Comp-1400

November 8, 2021

## Part A:

- a) 1\*3\*9\*27\*81\*
- b) 11---12---13---14---15 16---17---18---19---20
- c) 4-6
  - 5-5
- d) 20
- e) 5
  - 4
  - 3
  - 2
  - 1
  - 0
  - -1
  - -2
  - -3
  - -4 -5
  - -6
  - .

•

-infinity

The reason behind the infinite loop is due to the nature of the unsigned datatype. The for loop contains the condition of  $i \ge 0$ , meaning it's looking for a value that is greater than or equal to zero, but since i gets updated to -1 essentially unsigned is trying to find a positive value to get rid of the -1. But the condition i--, will continue to proceed into the negative values. Thus, giving you a infinite loop due to the contradiction between the unsigned datatype and the loop condition not breaking.

f) Sum of 1 to 5 is 15