**Question 1 (10 minutes)**

Write a java program to create the power function by using only plus(+) operation.

Example:

-Input base=2, pow=2 => Output 4

-Input base=2, pow=4 => Output 16

-Input base=10, pow=3 => Output 1000

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| --- |
| **public** **int** process(**in**t base, **int** pow) {    } |

**Question 2 (20 minutes)**

Write a java program to create HTML script table with specific list of data and number of columns

Example:

-Input [a, b, c], column=2

=> Output <table><tr><td>a</td><td>b</td></tr><tr><td>c</td><td></td></tr></table>

-Input [a, b, c], column=3

=> Output <table><tr><td>a</td><td>b</td><td>c</td></tr></table>

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| --- |
| **public** **String** process(**List<String>** list, **int** col) {    } |

**Question 3 (30 minutes)**

Apple falls down every day from the Apple tree. First day=1

Given the total of Apple and speed of falling.

The amount of Apple that being fallen = speed \* fallen amount of previous day

How many Apple left from Apple tree with specific day?

Example:

-Input 10, speed=2, day=1 => Output Apple left=9

day1 => fallen amount=1 => Apple left = 10-1 = 9

-Input 10, speed=2, day=2 => Output Apple left=7

day1 => fallen amount=1 => Apple left = 10-1 = 9

day2 => fallen amount=2\*1 =2 => Apple left = 9-2 = 7

-Input 10, speed=2, day=5 => Output Apple left=0

day1 => fallen amount=1 => Apple left = 10-1 = 9

day2 => fallen amount=2\*1 =2 => Apple left = 9-2 = 7

day3 => fallen amount=2\*2 =4 => Apple left = 7-4 = 3

day4 => fallen amount=2\*4 =8, but only 3 left from the tree =3 => Apple left = 3-3 = 0

day5 => fallen amount=no apple from the tree => Apple left = 0

-Input 20, speed=3, day=3 => Output Apple left=7

day1 => fallen amount=1 => Apple left = 20-1 = 19

day2 => fallen amount=3\*1 =3 => Apple left = 19-3 = 16

day3 => fallen amount=3\*3 =9 => Apple left = 16-9 = 7

|  |
| --- |
| **public** **int** process(**int** amount, **int** speed, **int** day) {  } |