Computer Science I **Java**

Unit Four Assignment Three:

Write a Java project (Applet) with just a driver class. This class requires only the init() method. This project should create a salary schedule for teachers at any school.

In the init() method, you should ask the user for 3 items.

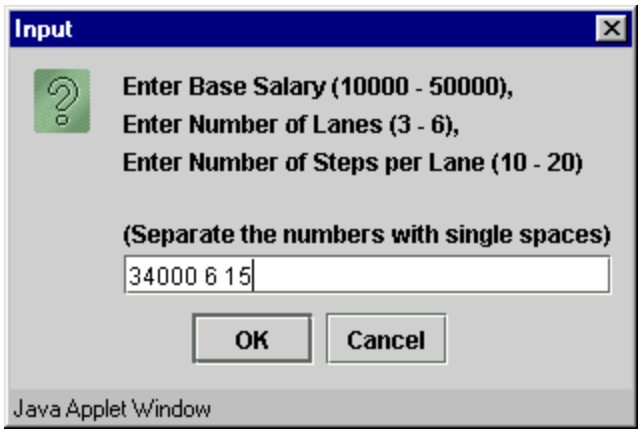
Base Salary (10000 - 50000) - {Bachelors Degree No Experience}
Number of Lanes (3 - 6) - {Each lane represents more education}
Number of Steps (10 - 20) - {Each step is a year of experience}

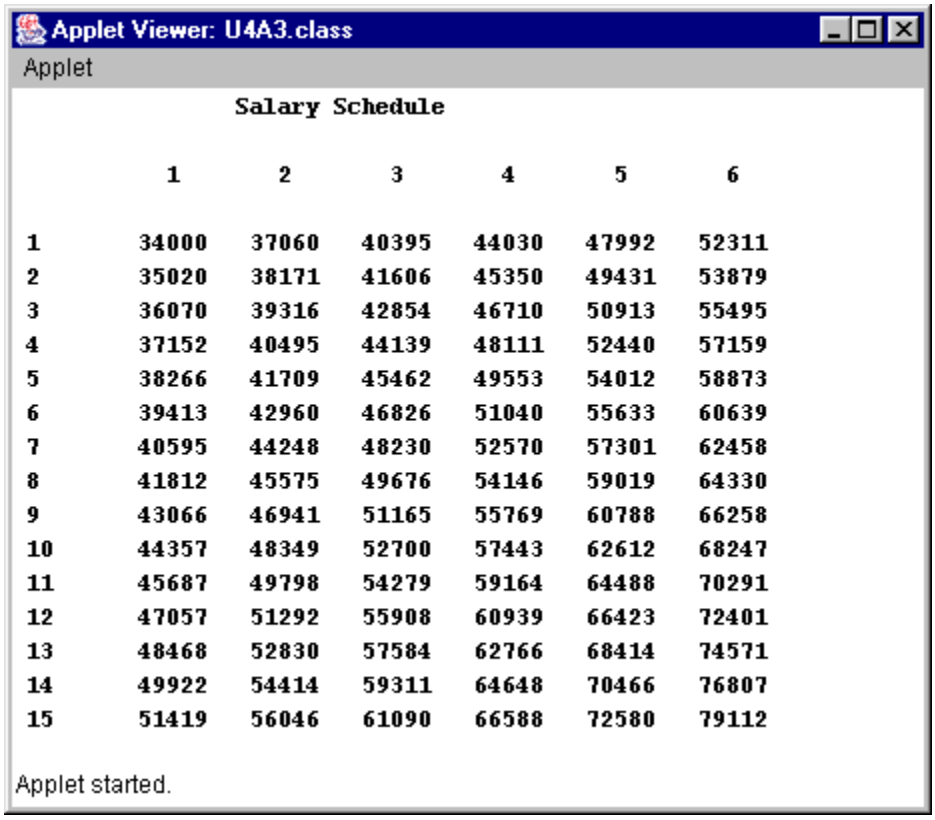
All three numbers should be entered into an Input Dialog Box, with one space between each number. You may assume that the user's data will be acceptable. You can use the String method, substring, to separate the numbers or you can use the StringTokenizer. Once the main string is divided into 3 substrings, you must parseInt each of these substrings.

To create the Salary Schedule, you must use a nested looping structure. As you move from one lane to the next, the salary is increased by 9%. As you move from one step to the next, the salary is increased by 3%. All salaries in the Salary Schedule are to be integers. The Salary Schedule should be placed in a JTextArea and the JTextArea should be added to a Container.

NOTE: Do not use the formula for the n^{th} term of a geometric sequence. This formula will not truncate individual terms before moving to the next term. Therefore, you will be several dollars off by the time you get to the last term.

All input and output should be pasted into a Word document and turned in with your code. This Word document should look like the one attached to this assignment.


Input
Enter Base Salary (10000 - 50000),
Enter Number of Lanes (3 - 6),
Enter Number of Steps per Lane (10 - 20)
(Separate the numbers with single spaces)
34000 6 15
OK
Cancel
Java Applet Window


Applet Viewer: U4A3.class
Applet
Salary Schedule
1 2 3 4 5 6
1 34000 37060 40395 44030 47992 52311
2 35020 38171 41606 45350 49431 53879
3 36070 39316 42854 46710 50913 55495
4 37152 40495 44139 48111 52440 57159
5 38266 41709 45462 49553 54012 58873
6 39413 42960 46826 51040 55633 60639
7 40595 44248 48230 52570 57301 62458
8 41812 45575 49676 54146 59019 64330
9 43066 46941 51165 55769 60788 66258
10 44357 48349 52700 57443 62612 68247
11 45687 49798 54279 59164 64488 70291
12 47057 51292 55908 60939 66423 72401
13 48468 52830 57584 62766 68414 74571
14 49922 54414 59311 64648 70466 76807
15 51419 56046 61090 66588 72580 79112
Applet started.