

COP2221 – Intermediate C++ Programming

10 points

Module #4 Assignment Two

Background: Turn to the Programming Challenges at the end of Chapter #7. Read Programming Challenge #3 (Chips and Salsa). Watch and study the associated **VideoNote** (class companion website) which walks you thru the entire programming process using parallel arrays. This example is very helpful for understanding the use of parallel arrays. **NOTE:** we've not yet covered how to pass an array to a function – don't stress about it – just follow the video's logic.

Programming Problem

You have been hired by the **Smooth Skin Institute** to create a C++ program to determine sales' bonuses for the companies' sales personnel. This will be a simple program (similar to Program 7-15 in the text). No welcome function and so on is needed – just code a correctly working program using function `main()`. The company has 5 employees. You will use 3 arrays to store: 1) employee's ID number (alphanumeric string); 2) total number of skin care packages sold by the employee; and 3) gross revenue of sales (total money generated based upon sales). No input is needed – simply initialize the arrays as demonstrated in the text.

Use this data:

- **H256** (employee ID), **1,567** (skin care packages sold), **14,389.75** (total money generated based upon sales)
- **B410, 2050, 18506.03**
- **K589, 3560, 35600.10**
- **M560, 1100, 9563.20**
- **S935, 578, 6234.25**

Using the array data – create a report. The report should have a title and the columns of data need to be labeled and formatted (2 places to the right of the decimal point where appropriate). The report will show the following for all employees (one report – not individual little reports per employee):

- Employee's ID
- Number of skin care packages sold
- Gross revenue generated
- Sales bonus earned (this value needs to be calculated)

The sales bonus for each employee is calculated as: \$400 plus \$5.00 per skin care package sold over 700 and 10% of any gross revenue over \$10,000.00 Be sure your output report is accurate as well as "attractive". Include needed comments.