Assignment II Advanced section Test case/Scenario

Let's assume that we have these users in the company. The policy premium is assumed to be known. You may modify them or put the flatRate, carPrice, etc to make the premium payment as prescribed.

Sara (from Wollongong) has 4 policies:

Sara Policies	Premium Payment	Car Model
Policy1	$200	Toyota Camry
Policy2	$500	Toyota Camry
Policy3	$300	Toyota Camry
Policy4	$1000	Nissan Dualis

John (from Wollongong) has 4 policies:

John Policies	Premium Payment	Car Model
Policy1	$500	Nissan Dualis
Policy2	$100	Toyota Camry
Policy3	$1000	Nissan Dualis
Policy4	$2000	Ford Ranger

Robert (from Sydney) has 4 policies:

John Policies	Premium Payment	Car Model
Policy1	$150	Ford Ranger
Policy2	$1000	Nissan Dualis
Policy3	$5000	Toyota Camry

Policy4	$400	Porsche Cayenne

Alex (from Melbourne) has 2 policies:

John Policies	Premium Payment	Car Model
Policy1	$500	Ferrari 488
Policy2	$1000	Nissan Dualis

The range array is {200, 500, 1000, 10000}

User: policyCount (String username, string password, int [] ranges)

Expected Output for all users:

Sara: {1, 2, 1, 0}
Robert: {1, 1, 1, 1}
Alex: {0, 1, 1, 0}
John: {1, 1, 1, 1}

InsuranceCompany: int [] policyCount (String adminUsername, String adminPassword, int [] ranges)

Expected Output: {3, 5, 4, 2}

Note: this can be done by adding the output of the previous method (policyCount) across all users together, e.g., 3=1+1+0+1 or 5=2+1+1+1

InsuranceCompany: HashMap <String, Integer []> policyCityCount(String adminUsername, String adminPassword, int [] ranges)

Expected Output:
Note: The output is given as HashMap key (city) => value (an array itself)

Wollongong => {2, 3, 2, 1}
Sydney => {1, 1, 1, 1}
Melbourne => {0, 1, 1, 0}

Note: For each user, get the city and add the user policyCount array to the corresponding array in the HashMap for that city.

InsuranceCompany: int[] userCount (String adminUsername, String adminPassword, int [] ranges)

Expected Output: {3, 4, 4, 2}

Note: How many user has got a policy from each range?

InsuranceCompany: HashMap <String, Integer []> userCarModelCount (String adminUsername, String adminPassword, int [] ranges)

Expected Output:

Note: The output is given as HashMap key (Car Model) => value (an array itself)

Toyota Camry => {2, 1, 0, 1} Note: 2 is Sara and John, first 1 is Sara, last 1 is Robert
Porsche Cayenne => {0, 1, 0, 0}
Ford Ranger => {1, 0, 0, 1}
Nissan Dualis => {0, 1, 4, 0}
Ferrari 488 => {0, 1, 0, 0}

Note: This method is using the following method to calculate the output

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User: HashMap <String, Integer []> policyCarModelCount (String username, string password, int [] ranges)

Expected Output:

Note: For each user the output is given as HashMap key (Car Model) => value (an array itself)

Sara: **[** Toyota Camry => {1, 2, 0, 0} , Nissan Dualis => {0, 0, 1,0}**]**

John: **[** Toyota Camry => {1, 0, 0, 0} , Nissan Dualis => {0, 1, 1, 0}, Ford Ranger => {0, 0, 0, 1} **]**

Robert: **[** Toyota Camry => {0, 0, 0, 1}, Ford Ranger => {1, 0, 0, 0}, Nissan Dualis => { 0, 0, 1, 0}, Porsche Cayenne => {0, 1, 0, 0}**]**

Alex: **[** Ferrari 488 => {0, 1, 0, 0}, Nissan Dualis => { 0, 0, 1, 0} **]**

InsuranceCompany: HashMap <String, Integer []> policyCarModelCount (String adminUsername, String adminPassword, int [] ranges)

Expected Output:

Note: The output is given as HashMap key (Car Model) => value (an array itself)

Toyota Camry => {2, 2, 0, 1} Note: Sara has two policies with Toyota Camry
Porsche Cayenne => {0, 1, 0, 0}
Ford Ranger => {1, 0, 0, 1}
Nissan Dualis => {0, 1, 4, 0}
Ferrari 488 => {0, 1, 0, 0}