1. Write a function that takes two strings and returns the number of letters that appear in both strings. You can use string indexing and slicing, but no string or list functions. For example: 'hello' and 'happy birthday' should return 1 because 'h' is the only letter both strings have in common; 'cat' and 'catastrophe' should return 3 because 'c', 'a', and 't' are all in both strings.

2. Write a program to determine who is the shortest and who is the oldest from a group of people. Ask the user how many people they want to compare, then for each person ask for their name, age (in years), and height (in inches).
3. Write a program that determines the average age of all the people living in a household and prints the names of people who are older than the average. Your program should ask the user for the number of people who live in their home and for the name and age (in years) of each person.

4. Repeat the previous question, but instead of asking for the number of people in advance, the user will either hit return without entering any text ("") or will enter "no one" for the name to signal there are no more residents in the home.
5. Write a function `age_differences` that takes two lists: `names` and `ages`. The ages in the 2nd list correspond to the names in the 1st. For example, if the lists are `names = ['Bojana', 'Július']` and `ages = [16, 20]` Július is 20 and Bojana is 16.

Your function should return a nested list representing a *table of age differences*. In this age difference table the cells correspond to the difference between the ages of the person in the column - the person in the row. The age difference table for the above lists is:

<table>
<thead>
<tr>
<th></th>
<th>Bojana</th>
<th>Július</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bojana</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Július</td>
<td>-4</td>
<td>0</td>
</tr>
</tbody>
</table>

This is represented as the following nested list:

```python
age_difference_table = [['', 'Bojana', 'Július'], ['Bojana', 0, 4], ['Július', -4, 0]]
```

Your `age_differences` function must use a *helper function*. 