Perl Hash and Arrays

Hash

Create a hash that contains the following *first-name => last-name* pairs:

```
John Norman
Robert Anson
Christopher Fowler
Robert Harris
Dan Simmons
```

Now add code to prompt for a first name. Use the reply to obtain the last name from the hash, and print the full name.

Arrays

Question #1

Create a Perl script that will perform the following tasks:

a) Create an array listing six of your favorite foods and six of your least liked foods.
b) Move the disliked foods to another array.
c) Print out the first three items in the favorite foods array. Include some descriptive text to clarify your output.
d) Ask the user to input another disliked food and append this new item to the array of disliked foods.
e) **Move** the newly added element to the beginning of the disliked foods array.
f) For the "favorite foods" array, **move** the value of the first element of the array to become the last element of the same array.
g) Print out the first and last elements of both arrays to show the changes from the previous step.
h) Print to the terminal the number of elements in each array with some text.

Question #2

On Linux machines, the file `/etc/passwd` contains a list of users on a system.

```
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:
daemon:x:2:2:daemon:/sbin:
nobody:x:99:99:Nobody:/:
```

Each line contains a user name, password (all x here), user id, group id, name, home directory, and shell. The fields are separated by colons. Write a Perl program to do the following tasks:

- Count how many usernames that are using bash shell and those that are using nologin shell.
- Write a Perl program that prints out the largest UID number.
- Display all usernames where the user id is less than 1000.
- Display all usernames that are greater or equal to 2000, sorted by username.