

▮ Pet Health Advisor – Vet Clinic System

This program is a simple **Veterinary Clinic Registration System** written in C++. It simulates a receptionist's interface for logging pet visits, choosing breeds, and recording conditions.

▮ Libraries Used

```
#include <iostream>
#include <vector>
#include <map>
#include <string>
#include <ctime>
```

- `iostream` : For input/output using `cin` and `cout`
 - `vector` : Dynamic array, used for storing lists
 - `map` : Key-value structure for storing animal types and their breeds
 - `string` : For working with text
 - `ctime` : To get current date and time
-

▮ Function: `toLower(string s)`

Converts a string to all lowercase letters. Useful for case-insensitive comparisons.

```
string toLower(string s) {
    for (char& c : s) c = tolower(c);
    return s;
}
```

▮ Example

```
toLower("YES") // returns "yes"
```

▮ Function: `getDateTimeNow()`

Returns the current **date and time** as a formatted string.

```
string getDateTimeNow() {
    time_t now = time(0);
    char buf[30];
    strftime(buf, sizeof(buf), "%Y-%m-%d %H:%M:%S", localtime(&now));
    return string(buf);
}
```

▮ Output Example

```
"2025-04-13 14:22:10"
```

▮ Function: `listBreeds(const string& type)`

Displays a list of animal breeds based on the selected animal type.

```
void listBreeds(const string& type);
```

- Uses a `map` where keys are animal types (dog, cat, etc.) and values are a list of breeds.
- Valid types: `"dog"`, `"cat"`, `"bird"`, `"fish"`, `"reptile"`

▮ Example

```
listBreeds("cat");
```

▮ Output:

```
Available breeds:
[1] Persian
[2] Maine Coon
...
```

▮ Main Program Flow (`main()`)

Step-by-step logic:

1. Greet user and ask to sign in.
2. Loop through pet registration:
 - Ask for owner's name
 - Ask for pet name
 - Choose animal type
 - Display and select breed
 - Enter disease/condition
 - Show summary with current timestamp
3. Ask whether to register another pet.
4. Ask to sign out.

▮ Sample Run

```
Sign in? (yes/no): yes

Enter owner name: Alice
Enter pet name: Charlie
What kind of animal? (dog/cat/bird/fish/reptile): dog

Available breeds:
[1] Australian Cattle Dog
[2] Boxer Dog
...

Select breed from the list above: Boxer Dog
Enter disease/condition: Cough
```

```
+----- REGISTRATION SUMMARY -----+
| Owner Name   : Alice
| Pet Name     : Charlie
| Animal Type  : dog
| Breed        : Boxer Dog
| Disease      : Cough
| Timestamp    : 2025-04-13 14:22:10
+-----+
```

Would you like to register another pet? (yes/no): no
Receptionist: Would you like to sign out? (yes/no): yes
Session ended. Goodbye!