

Exercise 3: Displaying Message Using Inheritance

This exercise requires you to implement the concepts of polymorphism/inheritance to display information about two base classes.

We'll cover the following ^

- Problem Statement
- Example

Problem Statement

The code below has:

- A **parent class** named `Animal`.
 - Inside it *define*:
 - `name` (`protected`)
 - `age` (`protected`)
 - `set_data(int a,string b)` function (`public`):
 - takes `age` and `name` parameters and sets them to given values.
- Then there are **two derived classes**
 - `Zebra`
 - `Dolphin`
- The **derived classes** should
 - Have a function that returns a string containing a *message* telling the `age` and the `name` as well as information about *place* of **origin** of that *animal*.
 - Here's a [link](#) showing how you can add values to a **string**.
 - **Hint:** You have to create **two separate message functions** for both the **base** classes.

Example

Input:

Input:

- `name` of `Zebra` is set to **Ana** and the `age` is set to 5
- `name` of `Dolphin` is set to **Jin** and the `age` is set to 2

Then:

Output

The zebra named Ana is 5years old. The zebra comes from Africa.
The dolphin named Jin is 2years old. The dolphin comes from New Zeland.

Expected Output

Write your code below. It is recommended that you try solving the exercise yourself before viewing the solution.

Good Luck!

```
#include <iostream>
using namespace std;

class Animal
{
protected:
    //define members here
public:
    //define members here
    void set_data (int a, string b)
    {
        //define here
    }

};

//define base class named "Zebra" here
class Zebra:public Animal
{
public:

    string message_zebra(string str)
    {
        //define here
        return str;
    }

};

//define base class named "Dolphin" here

class Dolphin: public Animal
{
```



public:

```
    string message_dolphin(string str)
    {
        //define here
        return str;
    }
};
```

