Homework 1: C++ classes   **Due Date:** 2/6/25

Use your knowledge of classes to implement a basic Pokémon class, including a method that determines a Pokémon's vulnerability to attack!

The following files are given to you:

1. A C++ header file (pokemon.h) declaring the **Pokemon** class.

2. A C++ source file (main.cpp) containing a main() function with tests.

Create a new C++ source file named pokemon.cpp that implements the class declared in pokemon.h so that pokemon.cpp and the provided files compile into a program that runs with no failed tests.
Submit just the source code of **pokemon.cpp**. You don't need to submit the pokemon.h and main.cpp files because I will use my own ones to evaluate your pokemon.cpp code. Do NOT make any changes to main.cpp nor pokemon.h files.

Access http://bulbapedia.bulbagarden.net/wiki/Type/Type_chart#Generation_I to see a table with the matchups suitable for Generation I. For this assignment you will work with the four types shown below only.

Defending Type

Attacking Type

×	NORMAL	FIGHT	FLYING	POISON
NORMAL	1×	1×	1×	1×
FIGHT	2×	1×	½×	½×
FLYING	1×	2×	1×	1×
POISON	1×	1×	1×	½×

Review the examples discussed in class and the textbook to get an idea of what you need to do.

Do not hesitate to use the corresponding topic in Discussions to post your questions/doubts about this assignment. I will reply as soon as I can.

IMPORTANT:

Make sure your program compiles and executes in full (it should pass all the tests included in main()).

<mark>You must submit ONLY ONE solution per team.</mark>

Your program must be well commented, use meaningful identifiers, and use indentation to improve its readability.

Your program must have the following comments at the top:

```
//****************************************************************
// Team #              CSCI 2380          Spring 2025          Homework # 1
// First and Last Name
// First and Last Name
//
//****************************************************************
```

When done, submit your solution through Blackboard using the "Assignments" tool. Do Not email it.

Paste the <mark>onlinegdb link</mark> to your final solution along with your <mark>source code</mark> in the textbox opened when you click on Create Submission before you click on Submit.

<mark>Note: There is another textbox where you can enter **comments**, DO NOT use it for your submisssion, please.</mark>

The following is the basic criteria to be used to grade your submission:

You start with 100 points and then lose points as you don't do something that is required.

-2: Did not pass test (each)
-5: Incorrect definition of member function name()
-5: Incorrect definition of member function Ndex()
-10: Incorrect definition of member function is_multitype()
-10: Incorrect definition of member function type1()
-10: Incorrect definition of member function type2()
-20: Incorrect definition of member function damage_multiplier() for single-type Pokemon

-20: Incorrect definition of member function damage_multiplier() for multitype Pokemon
-10: Incorrect/missing definition of constructor for single-type Pokemon
-10: Incorrect/missing definition of constructor for multi-type Pokemon
-10: Missing/too few comments
-40: Program does not compile
-20: Missing link to solution
-20: Missing source code
<mark>-100: The code submitted is not your creation (you got it from a web site or another person)</mark>
<mark>-100: No team solution (individual solutions)</mark>
<mark>-100: No team contribution</mark>
-10: Late

Important: more points may be lost for other reasons not specified here.