CPSC 121

Week 14
Abstract Classes

Lab 12 - Virtual Interfaces

Given:

- ❏ abstract class called **Creature**
- ❏ classes **Player** and **Monster** (derived from **Creature**)
- ❏ classes **WildPig** and **Dragon** (derived from **Monster**)

In the **Creature** class

- ❏ Define a string member, **CreatureName**, to store the class Creature's name.
- ❏ Two virtual functions
  - void DoAction() :
    Print the action of the object, and the actions have to be different from different classes.
  - void DrawOnScreen() :
    Print the object's name and call DoAction() belonging to the same class.

The class definition of **Creature** is:

```
class Creature
{
        protected:
                string CreatureName;
        public:
                Creature(string);
                virtual void DoAction() = 0;
                virtual void DrawOnScreen() =0;
};
```

Task: Implement the class **Player, Monster, Dragon and Wildpig** so that when execution the following code, the consol shows the execution result as the following:

Example Output:

Player Timmy is attacking!!

Monster UFO is doing monster stuff!!

WildPig Piglet is Running!!!

Dragon Viserion is breathing Fire!!!