## University of Pittsburgh Department of Electrical and Computer Engineering ECE 0302: Data Structures and Algorithms

## In-Class Exercise 2: Generic (Abstract) Bag Class

<u>Instructions</u>: create an interface for the generic Bag ADT and adapt our implementation of Bag to use this interface definition.

- 1. Download the starter code.
- 2. In the file abstract\_bag.hpp define a C++ interface for our Bag ADT. Have a look at the bag\_simple.hpp to know the functions needed to be defined in the abstract bag class. More specifically, define an abstract class called 'AbstractBag' in abstract\_bag.hpp. This abstract class should have only pure virtual methods corresponding to methods of 'Bag' class.
- 3. Adapt the Bag implementation using in the files bag\_simple.hpp and bag\_simple.tpp to use this interface in abstract\_bag.hpp. (The bag class should be derived from the abstract bag class).
- 4. Build your code locally as you work and make sure that it passes the test cases found in bag\_test.cpp

Submission: submit a zipped folder to Canvas.