CISC 3115 TY3
C23c: Generics: Exercises

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Outline

- Exercise C23c-1

- (Optional) Exercise C23c-2

Exercise C23a-1

- This exercise is to help us understand benefits of generic types.

    - Create directory C23a-1 in your weekly programming repository.

    - Write a GenericStack class as defined in Listing 19.1 (GenericStack.java)

    - Write a client class

        - Create a stack of Integers.

        - Push 3 Integer objects to the stack, and pop 3 out.

        - Create a stack of Doubles.

        - Push 3 Double objects to the stack, and pop 3 out.

    - Use git to make a submission.

(Optional) C23c-2

- This exercise is to help us understand benefits of generic types.
  - Create directory C23a-1 in your weekly programming repository.
  - Rewrite the GenericStack class in C23c-1 using an array instead of an ArrayList. You should check the array size before adding a new element to the stack. If the array is full, create a new array that doubles the current array size and copy the elements from the current array to the new array. After that, you add the element.
  - Test your GenericStack class using a client class
  - Use git to make a submission