SESSION 5: ABSTRACT CLASS & INTERFACE

Assignment 2

SESSION 5: OOPS: ABSTRACT CLASS & INTERFACE

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1. Introduction

This assignment will test your knowledge on Packages and Interface.

2. Objective

This assignment will help you to master the following concepts:

- Package

- interface

3. Prerequisites

Not applicable.

4. Associated Data Files

Not applicable.

5. Problem Statement

Create an interface Stack in package myPack with following methods

Methods:

- void push(int I)

- int pop()

Create two sub classes inheriting the Stack interface.

class FixedStack that can accept a fixed numbers of integers. The size of the Stack will be specified in the constructor. If the number of integers exceed the size, "Stack overflow" message should be displayed.

class VariableStack that can accept numbers more than its size. The size of the Stack will be specified in the constructor. If the number of integers exceed the size, the stack should automatically grow to accommodate the new element.

6. Expected Output

Make a program that checks the implementation of both the classes.

7. Approximate Time to Complete Task

1 hr