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| 1 | Create a class to represent city which contains a list of places to see.   * Provide methods to create the object with just the city name or with city name and places (stored as list) * Provide methods to add a place of visit, to remove place of visit, to display all places of visit. * Add exceptional handling so that remove does not crash if the given place is not in the city |
| 2 | Create a class called MyStack which supports push, pop and display operations.   * Implement the stack class using a list. Specify the upper bound of the size while creating the stack object. * Provide exception handling mechanism for stack overflow and stack underflow. |
| 3 | Create a module named Area which has functions to compute area of circle, rectangle and scalene triangle. Function to compute area of circle takes radius as argument, function to compute area of rectangle takes length and breadth as arguments and function to compute area of triangle takes lengths of three sides as arguments.   * Write client code (menu driven) which imports module Area, reads the input from user and invoke appropriate functions. * When module Area.py is executed as a python script, you must be able to specify command line arguments of the form as shown below:- * python Area.py circle 4 # this should invoke the function to compute area of circle with radius 4 * python Area.py rect 4 5 # this should invoke the function to compute area of rectangle with length 4 and breadth 5 * python Area.py tri 3 4 5 # this should invoke the function to compute area of triangle with sides 3, 4 and 5 * If the required number of arguments for a shape is not specified or if the number of arguments is more than what is required, give appropriate error message and exit.   Also experiment the following:-  a) Try importing different ways  b) Save the module in different path and try importing. |

**PAP Week 6 Lab Assignments**