Assignment 3

Q1. Write a class to find volume of a Cylinder by using following members. (**volume of Cylinder=3.14 * radius * radius *height**) (use modular approach)

Class having following member functions:

Cylinder()
Cylinder(double radius, double height)
getRadius()
setRadius()
getHeight()
setHeight()
getVolume()
printVolume()
Initialize members using constructor member initializer list.

Q2. Write a class for Time and provide the functionality

Time()
Time(int h,int m,int s)
getHour()
getMinute()
getSeconds()
printTime()
setHour()
setMinute()
setSeconds()

In main create array of objects of Time. Allocate the memory for the array and the object dynamically.

Q3. Stack is a Last-In-First-Out data structure. Write a Stack class. It implements stack using Dynamically allocated array. Stack size should be passed in parameterized constructor. If size is not given,

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allocate stack of size 5. Provide member functions like push(), pop(), peek(), isEmpty(), isFull(), and print().

Q4. Write a Matrix class. Allocate memory dynamically in parameterized constructor. Also write parameter-less constructor. Write accept() and print() functions. Also provide add(), subtract(), multiply() and transpose() function.