



USMAN INSTITUTE OF TECHNOLOGY

Department of Computer Science CS121 Object Oriented Programming

Lab # 06 Objects and Classes in Python

Objective:

This experiment introduces the students to the concept of Objects and Classes using Python as a Programming Language.

Name of Student: _____

Roll No: _____ Sec. _____

Date of Experiment: _____

Marks Obtained/Remarks: _____

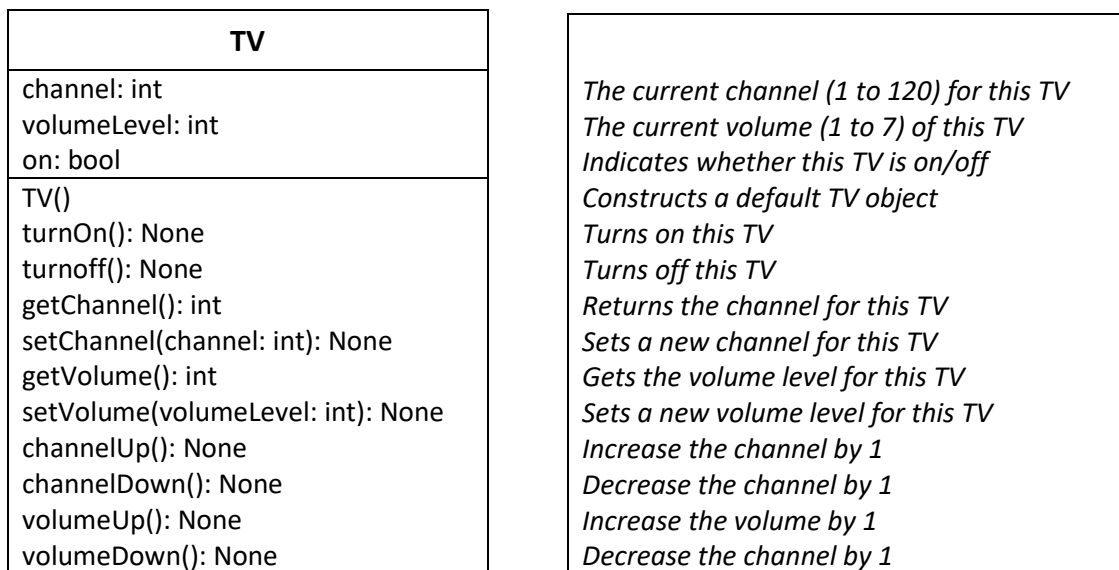
Signature: _____

Student Exercise

TV Sets

Each TV is an object with states (that is, current channel, current volume level, and power on or off are its properties that are represented by data fields) and behaviors (change channels, adjust volume and turn on/off are the actions each TV object implements with methods).

UML diagram for the TV class is shown below



Exercise 1

Write Python code for defining the TV class

Exercise 2

Implement a program to create two TV objects. The program turns on the first TV, set channel to 30 and set volume to level 3. The program then turns on the second TV, twice increasing its channel by 1, and increase its volume by 1. The program finally displays the state of both the objects.