**15 programs to learn Python**

1. Counting the number of objects created for a class
2. Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number

Suppose the following input is supplied to the program:34,67,55,33,12,98

Then, the output should be: ['34', '67', '55', '33', '12', '98']

SS

1. A website requires the users to input username and password to register. Write a program to check the validity of password input by users.

Following are the criteria for checking the password:

* At least 1 letter between [a-z]
* At least 1 number between [0-9]
* At least 1 letter between [A-Z]
* At least 1 character from [$#@]
* Minimum length of transaction password: 6
* Maximum length of transaction password: 12

Your program should accept a sequence of comma separated passwords and will check them according to the above criteria. Passwords that match the criteria are to be printed, each separated by a comma.

Example

If the following passwords are given as input to the program:

ABd1234@1,a F1#,2w3E\*,2We3345

Then, the output of the program should be:

ABd1234@1

1. You are required to write a program to sort the (name, age, height) tuples by ascending order where name is string, age and height are numbers. The tuples are input by console. The sort criteria is:

* 1: Sort based on name;
* 2: Then sort based on age;
* 3: Then sort by score.

The priority is that name > age > score.

If the following tuples are given as input to the program:

Tom,19,80

John,20,90

Jony,17,91

Jony,17,93

Json,21,85

Then, the output of the program should be:

[('John', '20', '90'), ('Jony', '17', '91'), ('Jony', '17', '93'), ('Json', '21', '85'), ('Tom', '19', '80')]

1. Please write a program which accepts a string from console and print the characters that have even indexes.
2. Take the input from the console and validate if its a valid email id or not using regular expressions in python
3. validate an input xml using regular expression python
4. CRUD operation on oracle DB table
5. create a hardcoded json with 3 fields. do CRUD operations on the JSON array eg.
   * 1.add a new user
   * 2.delete the user with name="aaa",
   * 3.fetch all the users with age >30
   * 4.change the status of user whose age is >40 to "elder person"

eg json:

[{

"name":"",

"age":"",

"status":""

},{}]

1. python program to manage hotel bookings. it should include user details entry, available rooms, the room which is assigned for the user hint: create your own json structure and read it from a file and write it into a file
2. python program which reads the excel sheet columns and rows and converts it into json and print.
3. CRUD operation on oracle database table
4. Create 3 tables Currency, Countries, States

Create 2 linkage tables for this 3 tables.

Write a python program which fetches currency and states of user entered country.

Adding a new currency for the country and updating the corresponding tables.