1. **print the reverse of a given string** using Ruby without using any in-built functions.
2. What is the sum of all the numbers between 0 and 100 that are prime and divisible by both 3 and 5?
3. Chandu is very fond of strings. (Or so he thinks!) But, he does not like strings which have same consecutive letters. No one has any idea why it is so. He calls these strings as **Bad strings**. So, **Good strings** are the strings which **do not** have same consecutive letters. Now, the problem is quite simple. Given a string S, you need to convert it into a *Good String.*

You simply need to perform one operation - if there are two same consecutive letters, delete one of them.

Ex : Input : abb

Output : ab

4. animals = [['dogs', 4], ['cats', 3], ['dogs', 7]]

Convert animals to {'dogs' => 11, 'cats' => 3}.

5. singers = {  
 kesha: "fun",  
 pitbull: "how is this dude famous?",  
 missy\_elliot: "really smart"  
 }

Create an array of the values associated with the :kesha and :missy\_elliot keys.

6. videos = {yoga: "stretch it out"}

Retrieve the value associated with the :dumb\_and\_dumber key in the videos hash. If the :dumb\_and\_dumber key is not available in the hash, return the string "no one's home".

7. days = ['mon', 'tues', 'wed', 'thur', 'fri']

Create an array of the elements with indexes 0 and 2. The return value should be ['mon', 'wed'].

8. first = ["cool", "busta", "odb"]  
 second = ["puffy", "cool", "busta"]

Create an array of all the elements that are in first and second with no duplicates.

9. nums = [1, 2, 3]  
 letters = ['a', 'b', 'c']

Use nums and letters to construct the following array:

[[1, "a"], [1, "b"], [1, "c"], [2, "a"], [2, "b"], [2, "c"], [3, "a"], [3, "b"], [3, "c"]]

10. Calculate body mass index BMI = weight x 703 / height \*\* 2

11. Calculate price of carpet required for given room

* carpet comes in 12 feet \* 12 feet size .
* cost of carpet= 30 Rs. / sqr feet
* cost of laying out carpet = 2 rs /sqft
* Get size of room in length and width from user
* Display minimum number of blocks required and minimum cost to layout carpet in the room

12. Take input from user and find total number of odd / even number from the array.

13. Average of a vehicle = Kilometer / Liter

* Take Average of vehicle from user and fuel in tank and find how much distance it can travel with available fuel.

14. Get temperature of difference cities. User will enter temperature either in °C Or °F. Display list of city with temperature in °F in descending order.

**NOTE:** Don't use built in functions to sort the data.