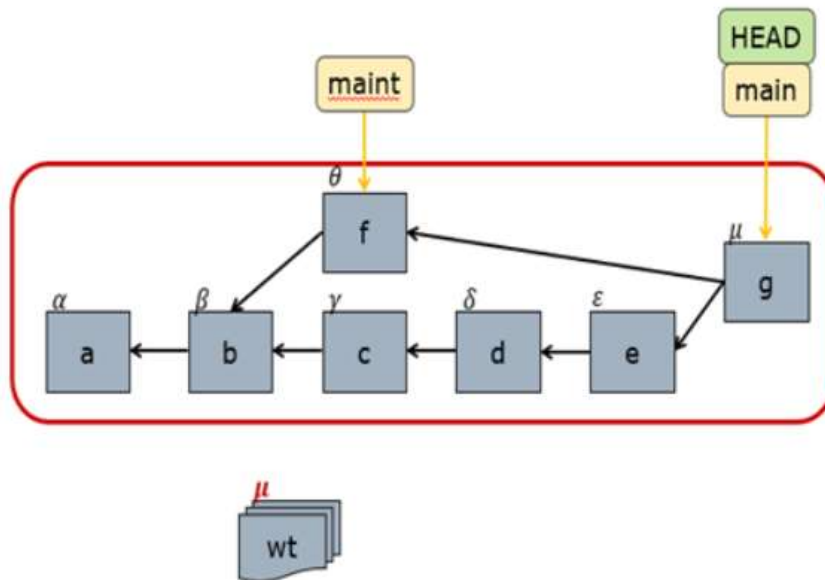
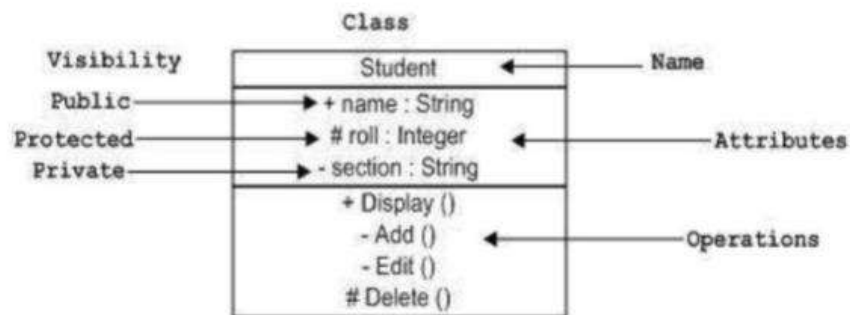
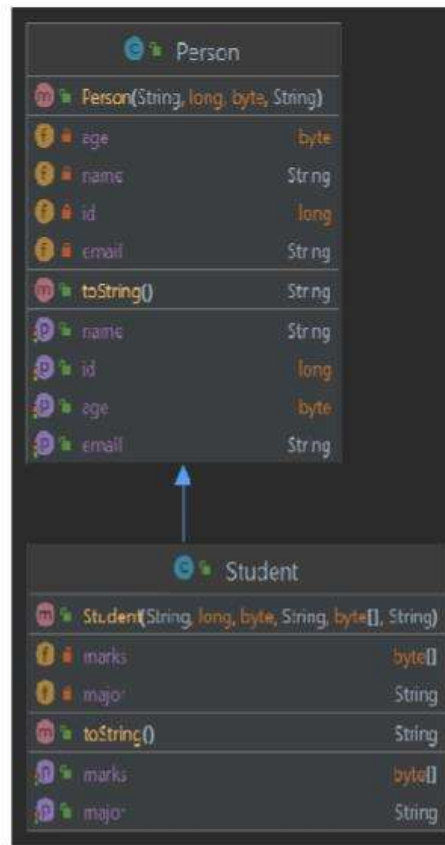


- Using Git, generate the diagram given:



- Generate a random sequence of 8 lower case letters, without repetition.
- Write a program that reads in a list of names from stdin (keyboard), then prints out the list in alphabetical order in all-caps.
- Given a string, say 'a#asg#sdfg#d##', produce an array of indices where '#' occurs in the string. The result should be [1, 5, 10, 12, 13]
- Given an array of integers, say [1, 2, 3, 7, 7, 1, 4, 5, 6, 2], produce the array that includes only the even elements, each squared. The result should be [4, 16, 36, 4]
- Given an array of (a mix of) integers and array of integers, where the (top level) integers are unique, say [3, 5, [4, 5, 9], 1, [1, 2, 3, 8, 9]], remove from the contained arrays all occurrences of the top level integers. The result should be [3, 5, [4, 9], 1, [2, 8, 9]]
- Write the Ruby code that, given an array of strings, say ["car", "van", "car", "car"], computes frequency of occurrence of each word. The result should be {"car" => 3, "van" => 1}
- Write a Ruby code that checks if a phone number is in valid format.
- Write the code to implement the diagram below:



10. Define a vehicle class in ruby with an attribute make and a method info that prints make instance variable. Then, define a Car class that inherits from Vehicle. The Car class should have an additional attribute model and override the info method to print “This is a [make] car, model [model].” Create an instance of Car with the make “Toyota” and model “Camry,” and call the info method.