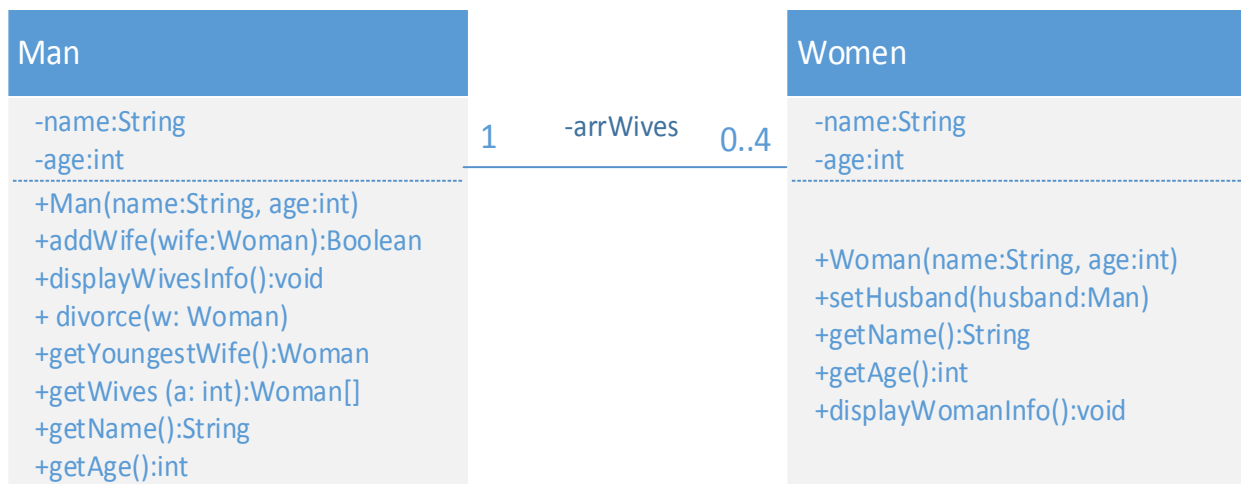


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Tutorial: Relationship between Classes (Association)

Ex 1. Create the classes along with the functionality given in the following UML Diagram. To understand the problem, please refer to the description given after the diagram.



Class Woman:

- Attributes:

name: the name of the Woman.

age: age of the Woman

- Methods:

- Woman(name: string, age: int): constructor. Assigns given values to the attributes and assigns null to husband.
- setHusband(husband:Man): sets the husband of the woman.
- displayWomanInfo(): this method displays all the attributes of the Woman along with the name and age of Husband if woman is married.
- getters: return the values of the corresponding attributes

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Class Man:

- Attributes:
 - name: the name of the Man.
 - age: age of the Man
- Methods:
 - Man(name:String, age:int) : constructor
 - addWife(wife:Woman): this method associates a new wife to the man. It returns true if the wife is associated false otherwise.
 - displayWivesInfo(): displays the detail(name and age) of every wife which is married to the man and in case if man is unmarried , it will display “He is single”.
 - divorce(w: Woman): this method removes the Woman w from the wives of the man.
 - getYoungestWife(): returns the youngest wife of the man.
 - getWives(a: int): this method returns an array containing all the wives of the man whose age is less than a.
 - getters: return the values of the corresponding attributes

HINT: How to Solve Association Man class will have an attribute array arrWives of type Woman along with a counter and Woman class will an attribute husband of type Man.