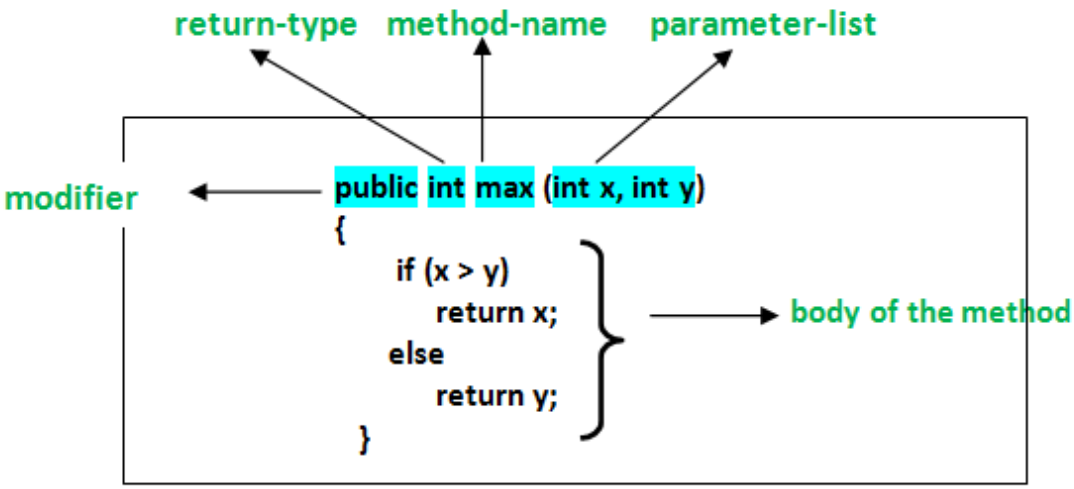
Experiment 3

Aim: Write a program to print the area of a rectangle by creating a class named 'Area' having two methods.First method named as 'setDim' takes length and breadth of rectangle as parameters and the second method named as 'getArea' returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

Theory :
Methods in java :

A method is a collection of statements that perform some specific task and return the result to the caller. A method can perform some specific task without returning anything.
Methods are **time savers** and help us to **reuse** the code without retyping the code.
In general, method declarations has six components :

- **Modifier-**: Defines **access type** of the method i.e. from where it can be accessed in your application. In Java, there 4 types of access specifiers.
    - public: accessible in all classes in your application.
    - protected: accessible within the class in which it is defined and in its **subclass(es)**
    - private: accessible only within the class in which it is defined.
    - default (declared/defined without using any modifier): accessible within the same class and package within which its class is defined.
- **The return type**: The data type of the value returned by the method or void if does not return a value.
- **Method Name**: the rules for field names apply to method names as well, but the convention is a little different.
- **Parameter list**: Comma separated list of the input parameters are defined, preceded with their data type, within the enclosed parenthesis. If there are no parameters, you must use empty parentheses ().
- **Exception list**: The exceptions you expect by the method can throw, you can specify these exception(s).
- **Method body**: it is enclosed between braces. The code you need to be executed to perform your intended operations.



Conclusion: Thus studied functions in java.

Questions:

Q.1 Explain method overloading in java.

Q.2 Explain any five string functions.