**Separate Methods and Logical Operators:**

**Solution 1.**

**i)** False **v)** False

**ii)** True **vi)** True

**iii)** True **vii)** False

**iv)** True **viii)** True

**Solution 2.**

**i)** A method in java is used to dedicate a particular task or function.

**ii)** A method should be declared in a private visibility modifier if it is not intended to be usable from outside the class it is defined in.

**iii)** Each method parameter consists of a type and a name. A method can have any number of parameters.

**iv)** Method arguments are the values given to each method parameter of the method which is being called.

**v)** Void Method can have parameters but it does not have any return value.

**vi)** return statement is used to produce results from the method. It is already declared before creating a method which type of value will be returned.

**vii)** While calling any method we may pass an argument to the method.This is called call by value method arguments are simply copied to independent method parameters.

**Solution 3.**

**i)** System.out.printf(“ %12d%n”, integer);

% tells printf we wish to format something.

12 tells its minimum total width to produce.

D tells it to produce the representation of a decimal whole number.

**ii)** System.out.printf(“%012d%n”, integer);

**Solution 4.**

It will print 100, 99 times on the output device (screen, printer etc..).

**Solution 5.**

**i)** This type contains just two boolean literals values called true and false.

**ii)**  Data Strings are supplied at run time to a program. At compile time java does not know how much memory to allocate for a given string variable.This is only known at runtime hence java should consider these variables as a reference types.

**Solution 6.**

**i)** Local variables are declared inside a method and are localised to that method. Different methods can have variables with the same name- they are different variables(method variables).

**ii)** Class variables are declared inside a class and methods can access class variables.

Class variables can be made public or private / static or dynamic.

**iii)** Here isRaining is of type int and can only store integer values.

**iv)** Potential to make a mistake.