Assignment - 6

Que 1 Method Overloading -

Multiple method within same class but diff. parameter list

Ex -

```
class MethodOverloading {
    public static void main(String [] args) {
MethodOverloading mo = new MethodOverloading();
System. out. println (mo. add (10, 20)) ;
System . out. println ( mo. add (10, 20, 30)) ;
}
public int add ( int x, int y) {
    return x + y ; }
public int add ( int x, int y, int z) {
    return x + y + z ; }
}
```

In this ex. the 1st method take two parameter and 2nd method take three parameter

Que 2 Rules for method overloading -

1) should be done in same class
2) parameter or datatype should be diff.

Complier determine which method is to be execute on the basis of argument passed.

Que3 Static keyword -
Used with class level variable, block method
Not to used with local variable
It belongs to class not to object
i.e, we can access it using classname

Difference -
Static - It initialized when class loaded into memory. It can access using classname
static member can only access other
- Static member with same class

NON- Static - It is initialized when each instance of a class is created.
It can access using reference variable
It can access both Static & non static in same class

Que4 static method cannot be override whereas non static method can override

It can share across multiple instance by using class name.

Que 5 When variable is declear as static then single copy of variable is created & shared among all.
It can be used to refer ~~for~~ common property or value for all object for ex - company name, college name, Bank name. etc

Que 6 If we make any ref. variable final then we can't modify, reassing or make it null..
Local variable can't allow with static

Que 7 It cannot be overriden method. cannot be change by sub class. The final keyword affect that we cann't modify any value or can't be assign to null.

Que 8 This -
this is a keyword in java
it can accessible only inside instance block
It always point to currently invoked object
In a constructor it is used to refer ~~the variable~~ instance variable even when there is a naming conflict

Que 9 Narrowing :

Converting a higher data type into a lower data type

Double - float - long - int - short - byte.

Widening :

Converting a lower datatype into a higher data type

byte - short - int - long - float - double

Que 10 - Narrowing - | Widening

int myInt = (int) mydouble; | double myDouble = myInt;

In this double is converted into int | In this ~~double~~ int is converted into double

Que 11 In java when narrowing is performed there might be some precision loss. We need to explicity specify the conversion

Que 12 It is also known as implicit type conversion It automatically assign smaller data-type without any explicit casting