

Q.1) What is method overloading?

Method overloading means having multiple methods with the same name in the same class, but with different parameters (number, type, or order).

Example:

`add(int a, int b)`

`add(double a, double b)`

Q.2) How does Java pass parameters?

Java passes parameters using pass-by-value.

This means the method receives a copy of the variable, not the original variable.

So, changes made inside the method do not affect the original value.

Q.3) Difference between return and void?

Return Void

Returns a value Does not return any value

Needs a data type No data type required

Example: `return a + b;` Example: `void display()`

Q.4) What is stack memory?

Stack memory is used to store:

Method calls, Local variables, Method parameters
Memory is automatically released when the method execution is completed.

Q.5) Why is modular code important?

Modular code is important because:

It makes the code easy to understand Errors are easier to find and fix Code can be reused

Maintenance becomes easy Large programs are divided into small, manageable modules