

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