* Difference Between Implicit and Explicit Type Conversion

| **Aspect** | **Implicit Type Conversion** | **Explicit Type Conversion** |
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| **Also Known As** | Type Promotion / Automatic Conversion | Type Casting / Manual Conversion |
| **Performed By** | Compiler automatically | Programmer manually |
| **Syntax** | No special syntax required | Uses casting syntax (type) |
| **Control** | No control by the programmer | Full control by the programmer |
| **Data Loss Risk** | Low (safe conversions) | High (may lose precision or truncate data) |
| **Conversion Direction** | From smaller to larger data types (e.g., int → float) | Any direction, even if unsafe (e.g., float → int) |
| **Use Case** | Happens during mixed-type operations | When specific type conversion is needed |
| **Example** | float b = 10; (int to float) | int a = (int)5.99; (float to int) |