

# Kotlin Cheat Sheet (100 Proper & Real Items)

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1. **val** – Declares a read-only (immutable) variable
2. **var** – Declares a mutable variable
3. **fun** – Defines a function
4. **println()** – Prints output to console
5. **when** – Conditional expression similar to switch
6. **if** – Conditional statement/expression
7. **else** – Fallback condition
8. **for** – Loop for iteration
9. **while** – Loop while condition is true
10. **do-while** – Loop executed at least once
11. **class** – Defines a class
12. **object** – Creates singleton object
13. **interface** – Defines interface
14. **data class** – Class for holding data
15. **sealed class** – Restricts class hierarchy
16. **enum class** – Defines enum constants
17. **null** – Represents absence of value
18. **?** – Nullable type operator
19. **!!** – Non-null assertion
20. **?.** – Safe call operator
21. **let()** – Executes block on object
22. **apply()** – Configure object
23. **also()** – Perform side actions
24. **run()** – Runs block and returns result
25. **with()** – Access object members
26. **map()** – Transforms collection
27. **filter()** – Filters collection
28. **forEach()** – Iterates collection
29. **MutableList** – Resizable list
30. **List** – Read-only list
31. **Set** – Unique elements collection
32. **Map** – Key-value pairs
33. **Array** – Fixed-size array
34. **Int** – Integer data type

- 35. **String** – Text data type
- 36. **Boolean** – True/False
- 37. **Double** – Decimal number
- 38. **Float** – Decimal number
- 39. **Long** – Large integer
- 40. **Short** – Small integer
- 41. **Byte** – Very small integer
- 42. **lateinit** – Late initialization
- 43. **lazy** – Lazy initialization
- 44. **companion object** – Static-like members
- 45. **init** – Initializer block
- 46. **constructor** – Class constructor
- 47. **override** – Override parent function
- 48. **open** – Allows inheritance
- 49. **abstract** – Abstract class or function
- 50. **try-catch** – Exception handling
- 51. **throw** – Throws exception
- 52. **import** – Imports package
- 53. **package** – Defines package
- 54. **is** – Type check
- 55. **as** – Type cast
- 56. **this** – Current object
- 57. **super** – Parent class reference
- 58. **CoroutineScope** – Coroutine scope
- 59. **launch()** – Starts coroutine
- 60. **async()** – Async coroutine
- 61. **suspend** – Suspend function
- 62. **delay()** – Coroutine delay
- 63. **Job** – Coroutine job
- 64. **Flow** – Async stream
- 65. **StateFlow** – State holder flow
- 66. **MutableStateFlow** – Mutable flow
- 67. **LiveData** – Lifecycle-aware data
- 68. **ViewModel** – Holds UI data
- 69. **Intent()** – Navigate between activities
- 70. **Bundle()** – Pass data
- 71. **RecyclerView** – Scrollable list
- 72. **Adapter** – Binds data to view

- 73. Context** – App environment
- 74. Toast** – Show short message
- 75. Log.d()** – Debug log
- 76. setOnClickListener** – Click event handler
- 77. findViewById()** – Find view
- 78. by viewModels()** – ViewModel delegate
- 79. Room** – Database library
- 80. Retrofit** – Network calls
- 81. Gson** – JSON parsing
- 82. SharedPreferences** – Store small data
- 83. DataBinding** – Bind UI to data
- 84. ViewBinding** – Type-safe view access