# Computing Unit 3: Data Types

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- Combination using c().
- Elementwise equality using ==
- Creation and testing of character vectors using character et al.





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- grep, grepl, sub, gsub, regexpr, gregexpr pattern matching and replacement using regular expressions
- strsplit split strings into substrings





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- ERE special characters: . \* + ?  $^{\$} | \setminus [ ] ( ) \{ \}.$
- Any non-special character is ordinary unless preceded by a \.





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- \ Quotes special characters, and introduces additional special constructs.





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- Inside character alternatives, the following are special: ] ^.
- [^...] is a complementary character alternative matching any character except the ones specified.
- Inside a character alternative, one can also use character classes by enclosing their names in [:... :] (character classes are alnum, alpha, blank, cntrl, digit, graph, lower, print, punct, space, upper, xdigit).





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- 3. record a matched substring for future reference with \DIGIT





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- 3.  $\{m, n\}, 0 \le m \le n \le 255$ , matches a sequence of *m* through *n* (inclusive) repetitions of the preceding regexp.

