R for Data Scientists

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Vectors

- Basic data object

- Types of atomic vectors

  – Logical, integer, numeric, complex, character and raw

- Single element vectors

- Multiple element vectors

  – Using colon with numeric/integer data

  – Using seq()

  – Using c()

- Accessing vector elements

  – Using [ ] and index (+ve/-ve integers), TRUE, FALSE, 0 and 1, condition

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Vectors

- Accessing vector elements

  – Positional indexing

  – Logical indexing

  – Named indexing

  – Blank indexing

- Vector manipulation

  – Arithmetic, element recycling, element sorting

  – Modify vector

  – Delete vector (not variable itself)

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Matrices

- Two-dimensional rectangular layout

- Elements of same type

- Created using matrix()
    - matrix(data, nrow, ncol, byrow, dimnames)
    - Vector input

- Accessing elements
    - Using row and column indices

- Matrix computation
    - Addition and subtraction
    - Multiplication and division

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