

Data_Types

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R Markdown

```
# Data Types in R - Annotated Code Report
# In R, various data types are available to handle different kinds of data.
# Here is an overview with example, code and comments explaining each type.
```

1. Numeric

```
# Assign a numeric value to a variable
a <- 42 # 'a' stores a numeric value (double by default).
```

2. Integer

```
# Assign an integer value using the 'L' suffix
b <- 5L # 'b' is explicitly set as an integer.
```

3. Character (String)

```
# Assign a character string to a variable
char <- "Hello, World!" # 'char' is a string containing text.
```

4. Logical (Boolean)

```
# Assign a logical value (TRUE or FALSE)
c <- TRUE # 'c' holds a boolean value of TRUE.
```

5. Complex

```
# Create a complex number
s <- 4 + 3i # 's' holds a complex number (4 + 3i).
```

6. Vector

```
# Create a vector with different elements of the same type
v <- c(1, 2, 3, 4, 5) # 'v' is a numeric vector.
```

7. List

```
# Create a list that can contain different data types
p <- list(42, "text", TRUE, 3 + 2i) # 'p' contains multiple data types.
```

8. Factor

```
# Create a factor for categorical data
q <- factor(c("Low", "Medium", "High", "Medium")) # 'q' is a factor with levels.
```

9. Matrix

```
# Create a matrix with numeric data
```

```
m<- matrix(1:9, nrow=3, ncol=3) # 'mat' is a 3x3 numeric matrix.
```

Summary

#Each of these examples demonstrates the basic data types in R. Understanding these data types is essential for working effectively with R.