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Batch: T1

Class TECSD

Practical no:03

#Vector in R -Character

Type print("R

Programming") Output:

"R programming" -Double Type

Print(99.99) Output:

99.99 -Integer Type

Print(2025L) Output:

2025-Logical Type

Print(FALSE) Output:

FALSE – Complex

Type

Print(4+5i) Output:

4+5i -Raw Type

Print(charToRaw("data"))

Output: 64 61 74 61

#Operators in R

#Arithmetic Operators –

Adds two vectors

V<-c(3,5.5,311

<- c(8, 3, 9)

Print(v+t)

Output: 11.0 8.5 12.0

-Subtracts v<-c(

9,8,2) t <- c(7, 6, 8)

Print(v-t)

Output: 22-6

-Multiplies v

<- c(3,5.5,4) t

<- c(6, 2, 5)

Print(v\*t)

Output: 18 11 20

-Divide v <- c(

3,5.5,8) t <- c(15,

3, 6) print(v/t)

Output: 0.200000 1.833333 1.333333

-Give the remainder of the first vector with the second v <- c(3,5.5,6) t <- c(4, 3, 4)

print(v%%t)

Output: 3.0 2.5 2.0-quotient

V <- c(2,5.5,6) t

<- c(8, 3, 4)

Print(v%/%t)

Output: 011

-The first vector raised to the exponent of second vector v

<- c(5,5.5,6) 1 <- c(8, 3, 4) print(v^t)

Output: 390625.000 166.375 1296.000

## #Relational Operators

Greater than v <-

c(5,5.5,6,9) T <

C(8,2.5,5,9) print(v>t)

Output: FALSE TRUE TRUE FALSE

Less V than c(7,5.5,6,2) t <-c(8,2.5,8,9) <

Print(v < t)

Output: TRUE FALSE TRUE TRUE equal to

V <- c(7,5.5,6,9)

T <- c(8,2.6,14,9)

Print(v == t)

Output: FALSE FALSE FALSE TRUE

– less than or equal v <- C(2,5.5,6,9) t

<- c(8,2.5,14,9)

Print(v<=t)

-greater than or equal v <

Output: TRUE FALSE TRUE TRUE c(4,5.4,6,9) t

<- c(8,2.5,14,9)

Print(v>=t)

Output: FALSE TRUE FALSE TRUE

Unequal

To V <-

C(5,5.5,6,10) t <-

C(8,2.5,8,9)

Print(v!=t)

Output: TRUE TRUE TRUE TRUE #

Logical Operators-Element- wise

```
Logical AND (&) v <- c(1,0, TRUE,  
FALSE) t <- c(1, 1, FALSE, TRUE)  
print(v & t)
```

Output: TRUE FALSE FALSE FALSE

```
-Element-wise Logical OR (1) v <-  
c(0, 0, TRUE, FALSE) t <- c(1,  
0,FALSE, TRUE) print(vt)
```

Output: TRUE FALSE TRUE TRUE

-Logical NOT (!) v <-

```
c(TRUE,FALSE, 0, 1) print(!v)
```

Output: FALSE TRUE TRUE FALSE

```
-Logical AND on first elements only (&&) v <-  
c(0, 1, TRUE) t <- c(1, 0, FALSE) print(v && t)
```

Output: FALSE (because 0 && 1 → FALSE) -

```
Logical OR on first elements only (||) v <- c(0,  
0, TRUE) t <- c(1, 0, FALSE) print(v || t)
```

Output: TRUE (because 0 || 1 → TRUE)