astha.R

ASTHAGINA DELIA P

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#Operasi Dasar  
sum=2+3  
sum

## [1] 5

diff=5-3  
diff

## [1] 2

product=10\*4  
product

## [1] 40

quotient=8/4  
quotient

## [1] 2

power=2^4  
power

## [1] 16

#operasi ekspresi  
result=(10+5)\*(6/2)-3  
result

## [1] 42

#Manipulasi string  
full\_name=paste("Asthagina", "Delia")  
full\_name

## [1] "Asthagina Delia"

length=nchar("hi, astha!")  
length

## [1] 10

sub\_string=substr("hi, astha!", 1, 3)  
sub\_string

## [1] "hi,"

#Manipulasi vektor  
numbers=c(3, 4, 5, 6, 7)  
numbers

## [1] 3 4 5 6 7

doubled=numbers\*3  
doubled

## [1] 9 12 15 18 21

first\_element=numbers[3]  
first\_element

## [1] 5

#pengenalan matriks  
mat=matrix(1:4, nrow=2, ncol=2)  
mat

## [,1] [,2]  
## [1,] 1 3  
## [2,] 2 4

element=mat[2,2]  
element

## [1] 4

#operasi pada matriks  
mat2=matrix(4:7, nrow=2, ncol=2)  
mat2

## [,1] [,2]  
## [1,] 4 6  
## [2,] 5 7

sum\_matrix=mat+mat2  
sum\_matrix

## [,1] [,2]  
## [1,] 5 9  
## [2,] 7 11

product\_matrix=mat%\*%mat2  
product\_matrix

## [,1] [,2]  
## [1,] 19 27  
## [2,] 28 40

transposed\_mat=t(mat)  
transposed\_mat

## [,1] [,2]  
## [1,] 1 2  
## [2,] 3 4

inverse\_mat=solve(mat)  
inverse\_mat

## [,1] [,2]  
## [1,] -2 1.5  
## [2,] 1 -0.5