A.S.A Lab Assignment 2

Name: Swanand Garge

Div : D(D2)

Roll no:42

SRN: 202201589

Q. To perform different opeartions on R data Structure

- a. list
- **b.**Array
- c. vector
- d. matrices
- e. Data frame.

```
# Creating a list
my_list <- list(name = "Swanand", age = 18, city = "Pune")</pre>
# Creating an array
my_array < -array(c(1, 2, 3, 4, 5, 6), dim = c(2, 3))
# Creating a vector
my_vector <- c(10, 20, 30, 40, 50)
# Creating a matrix
my_matrix <- matrix(1:9, nrow = 3, ncol = 3)</pre>
# Creating a data frame
my_data <- data.frame(</pre>
 student = c("Aditi", "Maitrey", "Aditya"),
 score = c(85, 92, 78),
  grade = c("A", "A", "B")
# Operations on list
cat("List - Name:", my_list$name, "Age:", my_list$age, "City:", my_list$city,
"\n")
# Operations on array
cat("Array - Element at (1, 2):", my_array[1, 2], "\n")
# Operations on vector
cat("Vector - Sum:", sum(my_vector), "Mean:", mean(my_vector), "\n")
# Operations on matrix
cat("Matrix - Transpose:\n")
print(t(my_matrix))
# Operations on data frame
cat("Data Frame - Student Names:", my_data$student, "\n")
```

Output:

List:

my_list	list [3]	List of length 3
name	character [1]	'Swanand'
age	double [1]	18
city	character [1]	'Pune'

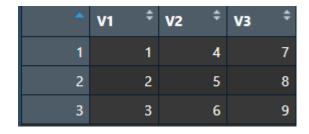
Array:

*	V1 [‡]	V2 [‡]	V3 [‡]
1	1	3	5
2	2	4	6

Vector:

Vector - Sum: 150 Mean: 30

Matrix:



My Data:

