

1. Write a R Program to find the Maximum and Minimum of a three numbers

Ans:-

```
a <- 5
```

```
b <- 9
```

```
c <- 2
```

```
max_value <- max(a, b, c)
```

```
min_value <- min(a, b, c)
```

```
print(paste("The maximum value is:", max_value))
```

```
print(paste("The minimum value is:", min_value))
```

2. Write a R Program to find the factorial of a given number.

Ans:-

```
num <- 5
```

```
fact <- 1
```

```
for(i in 1:num){
```

```
  fact <- fact * i
```

```
}
```

```
print(paste("The factorial of", num, "is", fact))
```

3. Write a R Program to print the Fibonacci series of a given number.

Ans:-

```
num_terms <- 10
```

```
first <- 0
```

```
second <- 1
```

```
cat(first, second, sep=" ", "
```

```
for(i in 3:num_terms){  
  next_term <- first + second  
  cat(" ", next_term)  
  first <- second  
  second <- next_term  
}
```

4. Write a R program to find the maximum and the minimum value of a given vector

Ans:-

```
vec <- c(5, 9, 2, 12, 10)
```

```
max_value <- max(vec)
```

```
min_value <- min(vec)
```

```
print(paste("The maximum value is:", max_value))
```

```
print(paste("The minimum value is:", min_value))
```

5. Write a R program to create a list of elements using vectors, matrices and a functions. Print the content of the list

Ans:-

```
vec <- c(1, 2, 3)
```

```
mat <- matrix(1:9, nrow=3)
```

```
my_function <- function(x){
```

```
  return(x^2)
```

```
}
```

```
my_list <- list(my_vector=vec, my_matrix=mat, my_function=my_function)
```

```
print(my_list)
```

6. Write a R program to compute sum, mean and product of a given vector elements

Ans:-

```
vec <- c(2, 4, 6, 8, 10)
```

```
sum_vec <- sum(vec)
```

```
mean_vec <- mean(vec)
```

```
prod_vec <- prod(vec)
```

```
print(paste("The sum of the vector is:", sum_vec))
```

```
print(paste("The mean of the vector is:", mean_vec))
```

```
print(paste("The product of the vector is:", prod_vec))
```
