**Experiment No.3**

**Q1. Program to display days of the week**

**Code :** days\_of\_week <- c("Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday")

for (days in days\_of\_week) {

print(days)

}

**Output :**

[1] "Sunday"

[1] "Monday"

[1] "Tuesday"

[1] "Wednesday"

[1] "Thursday"

[1] "Friday"

[1] "Saturday"

**Q2. Program to calculate Fibinocci series of given number.**

**Code :** nterms = as.integer(readline(prompt="How many terms? "))

How many terms? 10

n1 = 0

n2 = 1

count = 2

if(nterms <= 0) {

print("Plese enter a positive integer")

} else {

if(nterms == 1) {

print("Fibonacci sequence:")

print(n1)

} else {

print("Fibonacci sequence:")

print(n1)

print(n2)

while(count < nterms) {

nth = n1 + n2

print(nth)

# update values

n1 = n2

n2 = nth

count = count + 1

}

}

}

**Output :**

[1] "Fibonacci sequence:"

[1] 0

[1] 1

[1] 1

[1] 2

[1] 3

[1] 5

[1] 8

[1] 13

[1] 21

[1] 34

**Q3. Program to calculate Factorial of given number.**

**Code :** num = as.integer(readline(prompt="Enter a number: "))

Enter a number: 9

factorial = 1

if(num < 0) {

print("Not possible for negative numbers")

} else if(num == 0) {

print("The factorial of 0 is 1")

} else {

for(i in 1:num) {

factorial = factorial \* i

}

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

}

**Output : "The factorial of 9 is 362880** **"**