**Experiment No :** 14

**Experiment name :** Write a C program to compute the value of Euler’s number that is used as the base of natural logarithms . Using the following formula e = 1+1/1!+1/2!+1/3!+…….+1/n!

**Methodology :**

This program calculates the value of Euler's number (e) using the given formula up to the given value of n. It uses a loop to calculate the factorial and sum up the terms in the series. The computeEulerNumber function returns the value of e. The user is prompted to enter the value of n, and the result is displayed.

**Flow-Chart :**

char string1[100]; int i, length ; int flag = 0 ;]

Input word

scanf("%s",string1);

**Code :**

for(i=0 ; i<length ; i++)

length = strlen(string1);

#include<stdio.h>

int main (void)

{

int n,i,j;

float e=1.0, nFact=1;

printf("please enter the number: ");

scanf("%d", &n);

for( i =1; i<= n ; i++)

{

nFact\*=i;

e = e + (1.0/ nFact);

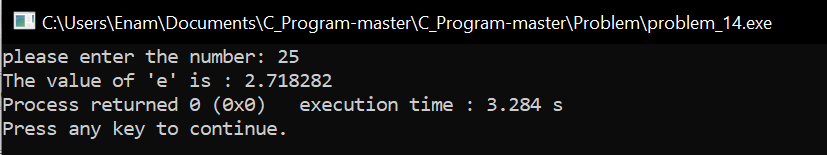
}

printf("The value of 'e' is : %f", e);

return 0;

}

**Output:**



**Result discussion :**

In this matrix we take the column and row of the best matrix from the user, then the elements of the first matrix are taken from the user, then the elements of the second matrix are again taken from the user, this time the two matrices are added and the output is shown to the user.