

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad – 500 043

LABORATORY WORK SHEET

Date: 11/07/2022

				Date: 2	11,191,1	2022	
Roll No: 刘	951A6754	I.Name: P.J	YOTHI PRASA	ииААии	revire?		
Exp No:	06	, Experiment Name:	FUNCTION.	5		************	
DAY TO DA	Y EVALUATI	ion and the second	Court that	415 541 4 0 3 11	ó_91.	41.4	
	Preparation	Algorithm Elle		Program Execution	Viva	Total	
		Performance in the Lab	Calculations and Graphs	Results and Error Analysis		4	
Max. Marks	4	4	4 11 4 1111	N 3014 (310)	4	20	
Obtained	~4	4		matrial	14:1	200	
	É	333193.3	cefficiency" -	treatment i	1	Me	
Signature of Lab I/C							
START WRITING FROM HERE:							
O a series of the series of th							
2. Xus	Design and develop a recursive & non-recursive function						
FACT	FACT (num) to find the factorial of a number, n! a defined						
log	by FACT (n)=1, if n=0, otherwise FACT (n)=n* FACT (n-1); Using						
this function, write a congram to compute the binomial							
co-refficient. Fabulate the visual for different values of							
nar with suitable message.							
# include cstaio.h>							
#include < conioh>							
11	int factorial (intn);						
floa	float binomialcoeff (const float n, const float Dinging)						
mai	n(){			·/ (~ / ~ / ~ / ~ /) ;	· Presi	ş ·	
int	n, r, fact;		, ii	"tamber of	'Marf ('		
11	reli			: (at . 5-1-		11	
prin	printf ("Enter the value of ner:");						
scan	scanf (1.1.d-1.d", &n, &r);						
print	printfle Factorial of eled = sled ", n, factorial (n));						
prin	printf ("In Binomial coffefficient = "1.1", binomial coeff (n,r));						
11 2							

```
int factorial (int n) &
   if (n <= 0)
   return 1;
   else
  return n* factorial (n-1);
  float binomialcoeff (const float n, const float r)?
  return factorial (n) /factorial (r) * factorial (n-r));
  INPUT: Enter the value of n & r: 63
   OUTPUT: Factorial of 6 = 720
           Binomial coefficient =00.000000
b. Design and develop a recursive function GED (num1,2)
   that raccepts two integers arguments. Write a c program
   that invokes this function to find the greatest roommon
   divisor of two given integers.
   # include < stdio.h>
   if (n==0)
   return m; traffic reports as an in
   else
                                     Enter b: 24
   gcd (n, m / n);
                              OUTPUT: GCD of 6 and 34 186.
   void main () ?
                                        author bardera la.
   inta, b, g, 1;
   printf ("In Enteta:") lans at all the little un
   scart ("-1.d", 21a);
   printf("In Enter b:");
   scanf ("1.d", 21n);
   g=gcd(a,b);
   8 = (a*b)/9;
   printf ("In acb of I d and I d: I d'a, b,g);
      where it is a some that the desire the constant of the con-
```

```
Design and idevelop a viecusive function FIBO (mim) that
   accepts an integer argument. Write a program that
   invokes this function to igenerate the Filonacci, sequence
   upto num.
  # include <stdio.h>
                               1 14101
   void fib (int); dente spanish who is try, do it, and
   void main() {
   int no
   prints ("In Enter the limit of the series:");
   scanf ("-1-d", &n);
   fib (n);
       Free may come got the total with the transfer of the same with the
   void fib(intn) { Int I TAPUT:
   int z=0, y=1, z,i) Enter the limit of the series:5
   printf (" of. 5d 1.5d", x,y);
                                           thinefulle as the for
                                OUTPUT:
                                          Ed Brida studeni H
   for (1=2; 1<n;1+1){
                                              Vaid 1 18 181 36 ();
   Z=X+Y;
                                                 ist maint)
   printf (4.1.5d 4,2);
                                      point of Falls a gartance Is
   2-21;
   y=2;
                                                      A LIGHT
   Design and Levelop a Cfunction ISPRIME (num) that accepts
a.
    an integer arguement and vietion 1 if the argument is
    prime, o otherwise. Write a c program that invokes this
    function to igenerate prime no 's between the given range.
   # include <stdio.h>
   目 include <conio·h>
                                               · ( ) [ " 5 - 4 - 7 ] [ ] [ ; [ ] [ ]
   int is prime (int);
   main.() {
    int num, resparb, introjuling in motion in the
    prints ("In Enter the range of integers -logenerate prime");
   scanf ("olod olod", ya, 4b);
   -for Ci=a; i<=b; i+1) { / magni i greet interning.
                                                         1-1311
    res = isprime (i); &
    printf ("It. Ld", i);
```

```
the time for the state of the many in the first for
if (f==0) prints ("No prime no's exist\n");
int is prime (int n) &
                      INPUT:
                                     THE STATE OF STREET
intij
                      Enter the range of integer to generate
for (j=a;j<=n/a;j++){
if (noloj ==0)
                                          prime ? 1 10
returno;
                     OUTPUT:
                 Besser 3 15 to limit out istanded Him
return1;
Design and develop of a function REVERSE (str) that vaccepts
a string arguments. Write a c program that invokes
this function to find the vieweise of given istring.
# include < stdio.h>
                    photo ( pod pod od ) alder
# include cotting. h>
                                  Miri mije Min
void Reverse ();
int main () {
printf("Enter a sentence");
Reverse ();
return 0;
void Reverse () & million | million
                               in dilling ports
chare; may and filmanta her businger
if (cl=1/h) sun and harmy
Reverse ();
printf (4.1.04,c);
                                      This rife.
TNPUT: Enter a sentence: Computer Programming Caulin
  and ( The roles Windy of helper legender win I.
OUTPUT:
          gnimmargorp ictupmoc
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